Vol. XX. AUGUST, 1879. No. 116.

THE

AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

MEDICINE AND SURGERY.

EDITED BY

DAVID W. YANDELL, M. D.

Prof. of the Science and Art of Surgery and Clinical Surgery, University of Louisville,

AND

THEOPHILUS PARVIN, M. D., LL.D.

Professor of Obstetrics and the Medical and Surgical Diseases of Women, Medical College of Indiana.

PUBLISHERS:

JOHN P. MORTON & CO., LOUISVILLE.

CATHCART & CLELAND, INDIANAPOLIS.

THREE DOLLARS PER ANNUM.

CONTENTS

ORIGINAL COMMUNICATIONS:

THE ELEMENTS OF SURGERY. BY JOHN CHIENE, M. D., F. R. C. S. E. . . 65

OBSERVATIONS ON ONE HUNDRED AND TWENTY-TWO CASES OF PNEUMONIA. BY OSCAR T. SCHULTZ, M. D. 88

FOREIGN CORRESPONDENCE—LETTER FROM OUR LONDON CORRESPONDENT. . 98

REVIEWS 105

CLINIC OF THE MONTH 116

NOTES AND QUERIES 125

Articles intended for the *Original Department* of this journal must be contributed to it exclusively.

The editors are not responsible for the views of Contributors.

THE REPUTATION

Which the celebrated SELTZER SPRING of Germany has maintained during many years, for the therapeutic value of its waters, is a fact well understood by the Medical Profession. The testimony of large numbers receiving benefit from their use is conclusive proof as to their efficacy. TARRANT'S SELTZER APERIENT is an artificial combination of the essential elements of these waters, as ascertained by strict chemical analysis, discarding those substances which are inert, and retaining those only which have a positive therapeutic value. These waters belong to that class known as ACIDULO-ALKALINE, which owe their medicinal virtues to the Carbonic Acid and to the Salines in combination. Hence they act chiefly on the digestive, renal and nervous systems.

AS A SALINE CATHARTIC,

We especially recommend our preparation to the careful consideration of Physicians. In all disordered conditions of the digestive organs, especially when connected with hepatic derangement; in those congested states of the alimentary canal and appendages peculiar to warm seasons and tropical climates; in the various forms of Dyspepsia, including Constipation, Acidity, Heartburn, etc.; in Uterine Disease, connected with an inactivity of the large intestines; as also in the nausea of pregnancy; in febrile conditions; in short, in all those types of disease where Saline Purgatives are indicated, we have no hesitation in recommending it as a mild yet efficacious Cathartic

AS A DIURETIC,

Its action is none the less marked, for in diminished doses its influence is transferred to the renal system. Hence in Rheumatism, Gout, Dropsy, and Diseases of the Urinary System, the SELTZER APERIENT can be relied upon to correct the acidity of the urine, and promote a copious renal secretion.

AS A PALATABLE CATHARTIC,

Our preparation is surpassed by no other. It completely removes that horror and disgust so often expressed in taking saline cathartics. Instead of nauseating a delicate stomach, it is cooling, refreshing, invigorating, making it especially desirable in that class of diseases where salines are administered in frequent and long continued doses. It is convenient for administration; being in a pulverized form, it only requires the addition of water to create at once a sparkling and refreshing beverage.

IT HAS STOOD THE TEST OF TIME

Successfully, and has received the flattering commendation of many eminent Physicians who have proved its adaptability to the diseases for which it is recommended above.

MANUFACTURED ONLY BY

TARRANT & CO.,

278 Greenwich St., New York.

☞ For sale by all Druggists. 77-19

THE AMERICAN PRACTITIONER.

AUGUST, 1879.

Certainly it is excellent discipline for an author to feel that he must say all that he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than anything else.—RUSKIN.

Original Communications.

THE ELEMENTS OF SURGERY.

BY JOHN CHIENE, M. D., F. R. C. S. E.

Surgeon to the Edinburgh Royal Infirmary, etc., etc.

LECTURE III.—INFLAMMATION.

INFLAMMATION—Causes: Exciting and Predisposing—Symptoms: Local—Constitutional—"The Feverish State:" Three Varieties in Surgical Practice—Pain Fever—Waste Product Fever—Putrefactive Product Fever—Principles of Treatment—Rest—Prevention of Putrefaction—Removal of Foreign Bodies—Application of Cold—Counter-Irritation—Theory of Counter-Irritation—Importance of Sick-Room Cookery.

Inflammation.—I have in the preceding lecture spoken of wounds and their repair, and I shall now proceed to the consideration of inflammation. It may possibly have struck some of you—especially those who have already attended a course of lectures on surgery—with surprise that I have hitherto not mentioned the word, and the more so that I may frequently have appeared to tread close upon the consideration of the thing. I certainly have intentionally refrained from using the word, and I certainly have spoken frequently of the thing as it is commonly understood; but it is because I know that there are certain associations connected with the word that would

interfere with a clear apprehension of the thing. The word inflammation seems to imply something evil which it is as necessary to avoid as scarlet fever; but when I spoke of the phenomena to be observed on the application of an irritant, you were prepared to give your whole attention to the process undisturbed by any association. Having done so you will not be led astray when you are told that the phenomena to be observed on the application of an irritant, as they have already been described to you, are the phenomena of the early stages of inflammation. My first care was to point out to you how clearly these phenomena were associated with the process of healing—how necessary they were to it: and I should be inclined to confine the term inflammation to the phenomena when in excess, and when they appear as the symptoms—heat, pain, redness, swelling.

It is by no means an easy thing to restrict the meaning of any term which is in common use in a wider acceptation. Perhaps it is often undesirable to make the attempt. With regard, however, to the term inflammation, the word unfortunately is apt to be misunderstood by any one beginning the study of medicine. He has heard it always used to mean something evil—this is the meaning attached to it in common life. The surgeon, however, knows that without it no wound would ever heal, and he welcomes it in its early stages. He desires, however, that it should be kept within bounds; he knows that if it goes too far, instead of being the means by which a wound heals it prevents that healing. No wonder that the junior student is bewildered. An attempt has been made in these lectures to avoid a misunderstanding by speaking of the process of repair before entering on inflammation. I now proceed to speak of the causes, symptoms, and treatment of inflammation.

Causes.—The causes which give rise to inflammation are divided into exciting and predisposing. The division is not a scientific one, but it is useful. An example will bring out what is meant by it. Two men receive the same injury, and are placed under the same treatment: the one recovers, and

the other dies. The circumstances of the two men from the time of receiving the injury were the same, and the difference in the result must lie in the state of the two men before the injury. The predisposing causes led to the difference in the effect. Thus the whole effect and the ultimate result will be determined by the nature and extent of the injury which is the product of the exciting cause, and by the circumstances and constitution of the patient, at the time he received the injury—the predisposing cause.

Exciting Causes.—(*a*) Mechanical injury. This requires no explanation. (*b*) Chemical. An acid which acts on the tissues, such as nitric or sulphuric acid, may serve as an example. (*c*) Heat or cold. Burns and scalds are the effect of the first; frost-bites and chilblains of the second. (*d*) Putrefaction. This is one of the most fertile causes, and with it is closely associated the question of antiseptic surgery. (*e*) Foreign bodies. You must be prepared to give a wide interpretation to this phrase. Pus which collects in the tissues is a foreign body as much as a leaden bullet. Indeed, it is often not so much what the foreign body is in itself as what it carries with it—the germs of putrefaction—that constitutes the exciting cause.

The *predisposing causes* are,—(1) Constitutional peculiarities. Such are, (*a*) hereditary tendencies, *e. g.*, to gout or scrofula; (*b*) bad habits, such as intemperance; (*c*) starvation; (*d*) proneness to excited action or over-sensitiveness: one man will keep on a mustard poultice for half an hour, while another can not bear it for more than five minutes; (*e*) altered or weakened nerve power, as when bed-sores form in cases of paralysis; (*f*) certain states of the blood, as when carbuncles form. Notice that this last is a refuge for our ignorance, and may mean almost anything. (2) Previous attacks. When you once have had a part attacked, there will always be weakness there. When once an inroad has been made by such diseases as gout and rheumatism, it is very easy for them to return.

Symptoms.—The symptoms I am about to speak of you will not find so well marked in all cases as I shall describe to you.

I am speaking of typical cases, and from the standard thus set up there are numberless variations. One patient has one symptom well marked, another has another; in one part of the body you will find inflammation characterized by the development of one symptom, and in another part another symptom attracts your attention. The cause of the inflammation, the constitution of our patients, and the seat of the disease, are the factors which determine the relative development of the symptoms in any one case.

The symptoms of the typical inflammation are either (first) local, or (second) constitutional. Each class deserves careful consideration, as about each there is yet a great deal of which we know nothing.

Local.—These are generally summed up in the old formula—redness, heat, swelling, pain. Some of these terms do not precisely describe the actual phenomena, and I prefer to present them in a modified form.

(*a*) *Alteration in color.*—The color toward which an inflamed part tends is red. Be the shade of color what it may, the alteration is always owing to the greater quantity of blood in the tissue. It is congested; and the amount of congestion will depend on the vascularity of the part, the strength of the patient, and the acuteness of the inflammation. On these conditions, therefore, will depend also variations in the intensity of the color: when there is biliary derangement, the color of the inflamed part tends towards yellow.

(*b*) *Swelling.*—This will be more prominent in those tissues in which there is the greater room for it. For example, in the conjunctiva the swelling is great, and so also in the testicle; but in such hard dense structures as bone, cartilage, the cornea and fibrous tissue, there is very little swelling. The special cause of this inflammatory swelling has been alluded to already more than once. In an irritated part there is effusion of the liquor sanguinis, together with migration of the white corpuscles of the blood; and this infiltration in the tissues, together with the subsequent proliferation of the cellular elements, causes the swelling.

(*c*) *Heat.*—You must understand by this not the mere feeling of increased heat in the part, but the actual fact that there is greater heat developed in it. We owe the demonstration of this to Simon and Montgomerie. It was ascertained by them that the temperature in the blood of an artery going to an inflamed part was less than that in a vein leading away from the part, and that the temperature in the latter was less than that in the seat of inflammation itself. The following illustration will show you the meaning of this. The air in this room while that fire is burning takes a course towards the fire-place and up the chimney, and you would find the temperature of the room, the chimney and the fire itself, roughly speaking, in the same relation as those of the artery, the vein, and the inflamed part. The explanation of the relation in this latter instance is the same as the explanation in the former. The inflamed part is the seat of the production of heat. In the changes that are going on there—changes tending to degeneration—there is continual oxidation to a much greater extent than is usual in the normal tissue, whence the increased heat.

(*d*) *Altered sensibility.*—The word "pain" does not express all that is meant by this. When you have inflammation of the ear, you have tingling; and when the eye is inflamed, flashes of light pass across it without an outward cause. But the organs of special sense being put out of question, pain is the general form of manifestation of this symptom. It is of various kinds, which can not be described otherwise than by the graphic epithets which are used by those who have felt them — starting, throbbing, aching, burning, gnawing, etc. Very frequently the intensity of the pain varies with the denseness of the structure affected. The pain in acutely inflamed bone or tendon is excessively severe, while in cases of inflammation of the loose cellular tissue it is comparatively mild. This altered sensibility in all its modes is due, no doubt, to the pressure upon the sensory nerves. The pressure on the sensory nerves will be most acute in the dense tissues, where the effusion is so strictly confined; while in the looser

tissues, where the added constituents have room to expand, the pressure is not felt so acutely. While the sensory nerves are affected in this manner, it can not but be that the vaso-motor nerves are also influenced, and the peculiarities in the vascularization of an inflamed part will be partly due to this latter cause.

One form of pain I must not omit to mention here. When there is disease of the hip joint, there is pain experienced in the knee. When there is inflammation of the bladder, there is pain at the point of the penis. These are examples of what is called sympathetic pain, and are due, no doubt, to a peculiar arrangement of the nervous mechanism. Fuller discussion of the subject I must defer till a later period, when I speak of counter irritation.

(*e*) *Modification in function.*—This is a result of the interference with the nutrition of the part. An inflamed muscle can not contract; an inflamed bladder can not hold water; an inflamed eye can not see, and so on through all the organs of the body.

Constitutional symptoms.—It is especially about this class of symptoms that our ignorance is most manifest to ourselves. But if any of you desire to attempt to let in a little light upon the obscurity that reigns here, I will say in passing that I know of no other way by which best to approach this study than a sound knowledge of physiology. I have had occasion to magnify this study to you before, but in the consideration of these constitutional symptoms of inflammation especially, you will not advance a single step in explanation unless fortified by a careful discipline in physiology.

The constitutional symptoms are summed up generally in the expression, *the feverish state.* There are great variations in the character and intensity of this state, but we may with confidence refer them to the interactions of the three conditions mentioned a little ago—the cause of the inflammation, the constitution of the patient, and the seat of the inflammation. We have a specific poison, and we have the constitution on which the poison acts; and a fever, like every other

product of nature, will undergo modifications both from the seed whence it sprung and from the soil where it was reared.

The feverish state is the collective name for a number of familiar symptoms. I shall take these *seriatim*.

First, there is a rise in temperature, accompanied by a rigor and increased thirst, with want of appetite. Secondly, the secretions are scanty, *i. e.*, the skin does not act, but becomes hot and dry, and the normal amount of perspiration is absent; the bowels are constipated on account of the lessened secretions from the lubricating glands; the urine is small in quantity and high-colored, from defective action of the kidneys; the tongue becomes furred and unclean, because the secretion of the salivary glands is affected. All these are manifestations of the second symptom. Thirdly, respiration and the heart's action are increased. The latter of these phenomena is, as we shall see, the result of the former. Fourthly, certain nervous complications take place. Languor and severe headache set in, and are followed by a confusion of ideas rising maybe to a state of delirium.

This condition may end in death as a result of exhaustion, or the patient may be lifted up again and recovery take place. The recovery is preceded by a critical evacuation. The secretory organs begin to act vigorously. A profuse perspiration breaks out; the bowels are freely moved; even unwonted passages may be found for the renewed life of the body, and there may be bleeding from the nose.

Causes of the constitutional symptoms.—To assist in seeking for a proximate cause of all these phenomena, we have a few established facts in physiology and pathology. There is a process of increased oxidation going on in the inflamed part, and associated with this an increased production of heat and an increased production of effete matters; there is an accumulation of these waste products in the blood and deterioration thereby, and this is furthered by the defective action of the secreting organs described above; and, lastly, there is nature's attempt to throw off the mischief. Let us see how far these conditions will lead us to explain the proximate causes of the symptoms mentioned above.

(1) *Rigor and rise of temperature.*—We have all suffered from this, and know well what it is. When you have a rigor, there is contraction of the vessels at the periphery of the body, and dilatation of the vessels in the internal viscera. This affects the mechanism which regulates the addition and withdrawal of heat in the body. The liver is the great heat producer, assisted to some small extent by the muscles; the skin is the great heat withdrawer—of every one hundred degrees of heat withdrawn seventy-seven degrees being by way of the skin. In the above circumstances, then, there is contraction in the seat of common sensation, whence the feeling of cold and shivering; but there is dilatation and increased activity in the heat-producing area, whence the rise in temperature. You may compare the body to a room. You may increase the temperature of the room in one of two ways, either by a larger fire or by preventing the heat that is formed from getting exit. Both of these causes may be at work at the same time. Increase the size of the fire, close the windows. The liver is the fire, in it you have increased vascular activity; the skin is the closed windows, in it you have vascular contraction. But why there should be contraction peripherally and dilatation in the viscera, we do not know. We can understand why one should feel cold after dinner, because we are aware of a definite cause for visceral activity; but we are aware of none in a case of blood poisoning.

(2) *Scantiness of the secretions.*—The blood is heated and deteriorated, and the skin, kidneys, etc., do not receive a proper supply of good blood, and their normal function is impaired. The passage of heat also is affected by this diminution in the excreta. After a time there will be a poisoning of the nervous centers, and the nervous action on the secretory organs will still further complicate the process.

(3) *Increase of respiration and heart's action.*—This is simply nature's attempt to throw off the mischief. The lungs in health throw off about twenty per cent. of the heat that is withdrawn from the body: they now attempt to do more, and to take the place of the skin. The respiratory and cardiac

ganglia work longer than the other and are able for their work when the others have failed, and therefore they try to do the work of the others also.

(4) *Certain nervous complications.*—This simply means an advance of the blood in its deteriorated state to the nervous centers and a poisoning of them.

Such, so far as we can ascertain, is a probable explanation of *how* these symptoms come about; it remains that we consider the "*why*" of the state as a whole. What is the cause of the feverish state?

Causes of the feverish state.—There are three causes present of which we know something. It can not be said that these three causes are present in all instances. Indeed, we actually count three distinct types of fever, each marked by the predominance of one of these causes, and the comparative inactivity of the other two. These are the *pain fever*, the *waste product fever*, and the *putrefactive product fever*. Though they are essentially quite distinct, yet in the majority of cases they are more or less coëxistent.

(*a*) *Pain fever.*—You may call this, if you like, tension fever, as it is tension which is the objective fact when pain is produced. It is of very common occurrence, quite apart from the rest. Suppose that one of you suffer from whitlow—an inflammation of the flexor tendon on the front of the finger. When the pain grows intense, you are seized with a rigor, and a rise in temperature occurs, which continues until the surgeon cuts down upon the seat of inflammation, and affords local relief. The seat of inflammation is under the fascial sheath, and as you know there is very little space under this unyielding material to give the effusion room to spread. Great pressure is thus caused upon the sensory nerves. This stimulation is communicated to the center in the medulla oblongata, from which impulses sent along the vaso-motor nerves induce the rigor and consequent rise in temperature.

(*b*) *Waste product fever* (*wound fever or traumatic fever*).—In this kind of fever you have a distinct poison passing into the blood; the manufacture takes place at the seat of the

local injury. There is increased oxidation, and the effete products of this process being abnormal, have no immediate normal outlet. They remain in the blood and tissues, and are conveyed to other parts of the body chiefly by means of the lymphatics. The constitutional disturbance is met with from the second to the eighth day after receiving the wound. During this time the surface of the wound is an absorbing surface, and the mouths of the lymphatics are open. After this period generally granulation commences, and with the commencement of this the wound ceases to be an absorbing surface; the mouths of the lymphatics are closed, and the surface begins to cast off.

This poison is not a strong one, and that the effects may be appreciable a large dose is required, and therefore a large surface of wound. The effect lasts no longer than the period of production of the effete matter. This condition disappears with the appearance of granulation; absorption only takes place when the wound is recent, when the lymphatics and blood vessels are open; when they are closed, then the wound fever ceases. Such is the waste product or traumatic fever.

(*c*) *Putrefactive product fever.*—This is by far the most important, because it is the most dangerous, kind of fever which the surgeon has to deal with. It may occur at any time until the wound is healed. Unlike the traumatic fever it does not require a large dose of the poison, nor on that account a large absorbing surface. It is a powerful poison. Besides the amount of the dose, the constitution of the patient is an important factor in the process. The poison enters either by the lymphatics or by the blood vessels. Two types of putrefactive poisoning are met with. The first is septicemia; in this the course of the fever is very rapid. In the second (pyemia) it is slow, and a patient may linger on for weeks under an attack of this variety. In one who has been strong and healthy up to the time of receiving a wound, and who is inoculated with the putrefactive product, the fever is apt to take the acute form, while a weakly patient wastes away with a fever of the low or chronic type. In all probability the

septicemic variety enters by the lymphatics; the pyemic variety enters by the blood vessels. Septicemia occurs soon after the infliction of the wound; pyemia at a later period.

The treatment of pyemia or septicemia is, I am sorry to say, unsatisfactory; it is a most dangerous disease, and the majority of those who have died of the effects of operations have been killed from this cause. But if the treatment is a subject for despondency, on the other hand the prophylaxis of the disease may be so conducted as to give the very best results; and this will form a topic for fuller consideration at a subsequent stage in these lectures. I have never known a patient suffer from pyemia or septicemia in whom the wound was antiseptic.

Principles of treatment.—In treating inflammation, as surgeons, remember that you have the advantage of knowing that at a certain time, viz., after a wound has been received, and in a certain place of the body, viz., the part which has been wounded, inflammation may with some probability be looked for. Preventive measures, then, ought always to have a large share of the surgeon's attention in the treatment of inflammation. And as in most cases the inflammation is kept up by the continuing presence of the original irritant, the principles of curative treatment will be much the same as those of preventive treatment. In the following observations you will understand what I say to apply in great part to the one as well as to the other.

Rest.—The first great principle which we must learn to apply is that of rest. Your study of physiology must be brought into play to teach you what is rest and what is unrest for any particular organ; for to rest an organ simply means to prevent it from performing its function either by rendering the performance unnecessary altogether, or by calling into action other agencies which may take the place of the one in question. Rest may be divided into general rest and local rest.

One of the great difficulties you will meet with in practice is in dealing with patients of an over-sensitive disposition.

Your first aim must be to reduce these people to such a condition of rest as will give the affection they are suffering from a fair chance of recovery; and, for this purpose, no medicine is so valuable as opium. The caution which you most need in the administration of this drug is that you must beware of giving too small doses. Small doses stimulate, and it requires a large dose to obtain the sedative action.

The means you employ to secure local rest may be either mechanical or physiological. When you apply a splint to a fractured limb, in order to overcome and prevent the action of the muscles, the means are mechanical; when you exhibit purgatives and diaphoretics, in order to relieve the kidneys of their work, the means are physiological; when you pack the penis and testicles in cotton-wood, and at the same time administer bromide of potassium or camphor, the means are both mechanical and physiological. There is no definite line of demarcation between these two methods. The body is a living organism, and the performance of every one of its functions is a physiological process; but at a number of points we can observe the application of mechanical principles, as in the motion of a bone pulled upon by a muscle, and consequently when we wish to interfere with an action of the latter kind, we can to a certain extent adopt mechanical means.

In many cases where the performance of the function is not an essential part of the vital process, and where it is under the control of the will, you will be assisted by nature in your efforts. In an inflamed joint there is acute pain felt in the act of moving, and on that account the patient will voluntarily exercise all his care to keep it at rest. Pain is often an excellent splint. But when the control of the will over the muscles is diminished, as in sleep, this aid is gone; hence the intense pain felt in an inflamed joint when the patient is dropping off to sleep. Of course sleep must be secured at all risks, and the bandages, weights and splints we apply have reference in such cases mainly to the state of the patient when asleep.

The amount of energy in the body is definitely limited,

and sometimes in order to relieve one organ from tension and work, it is sufficient to put an extra amount of pressure on another. The typical example of this is in cases of overworked brain. The remedy is active bodily exercise. When engaged in playing football, as you know, it is actually impossible for you to think in a sustained and consecutive fashion. Your brain, therefore, "gets a rest," when your limbs are active, or when your bodily senses are occupied as your eyes are with a change of scene, your thinking brain gets a rest.

The second principle I would recommend for your attention is the *prevention and cure of putrefaction;* entering into this subject involves the detailed study of antiseptic surgery, which I will defer until I come to suppuration.

Thirdly, we must take steps for the *removal of foreign bodies*, which do harm by causing unrest. These I would divide into two classes. There are the true foreign bodies, those which enter from without. Such are pieces of cloth, bullets, splinters of wood, etc. These chiefly derive their power of doing mischief, and therefore their importance, from the circumstance that they generally carry along with them the seeds of putrefaction. An aseptic bullet may get into a man's body, and lie there for years without doing any harm. But besides these true foreign bodies, there are others which it would not strike you to call foreign bodies. Pus is a foreign body; the effusions in hydrocele or synovitis are foreign bodies. They have no business where they are, and they are performing no function. They are merely pressing on the neighboring tissues and acting as irritants. These foreign bodies are produced from the tissues in which they lie; but that is not the principal fact to be noted regarding them. *They are constantly being added to;* and their action as mechanical irritants is therefore ever growing more severe.

These obstacles to recovery and excitants of inflammation must be removed; and the removal of the third class I have mentioned requires particular methods. Take a case of synovitis where the knee-joint is affected. The treatment often is to take a fine trocar, and opening with this into the joint let

out the contained fluid. It may probably be necessary to do this more than once. The remedy is intermittent in its action, in its power for good. If it is necessary to give the joint continuous rest for some time, then a drain is inserted to draw off the fluid continually. This is an example of the curative action of a drain. You have an example of its preventive action when it is inserted into an operation-wound before sewing it up. Do not suppose that it is always necessary to drain a wound externally. There are great surfaces of the body which in a healthy condition are absorbing surfaces, and it is sometimes possible to take advantage of their existence to drain our wound. For example, a wound near the knee-joint may be drained into the knee-joint and completely stitched up. The wound in ovariotomy often requires no external drain, if the peritoneum is healthy. Might not the wound made in an operation for hernia be drained into the peritoneal cavity? In a case of femoral hernia in the female, it is very difficult to keep the wound aseptic, since it is so near the external opening of the urethra. If, then, we could drain our wound into the peritoneal cavity, we might have healing of the external opening in forty-eight hours by the first intention.

Fourthly, *the application of cold* will sometimes be found of use. When inflammation has reached a marked degree, cold may injure, and generally it must only be used at the very outset. Again, it is only useful in superficial inflammation, except in the case of inflammation within the cranial cavity, where it is used with excellent effect. The amount of cold necessary may be set up either directly as by ice, or indirectly by evaporants.

Counter-irritation.—We know fairly well the modes of action of the foregoing therapeutical agents; but I have to deal now with one very important principle of treatment of which we know very little. I shall present to you one or two facts which may serve to reveal the meaning of *counter-irritation.* Inflammation of the lungs is relieved by the application of a blister to the chest. An inflammation in the knee-joint is

treated by a blister to the skin, and a case of ulcerated cartilage may also be treated by inducing an ulcer in the superficial tissues.

To speak shortly of the explanation of these facts, we may lay it down as a safe generalization that two inflammations of a different organ or tissue can not exist comfortably in the body at the same time. To take an example: A person is suffering from mumps—an inflammation of the parotid gland. Suppose the person a male. One morning when he wakens he finds the inflammation in the gland gone, but his testicle is swollen. Suppose the person is a female. In her case the inflammation disappears coincidently with the appearance of ovarian irritation. An individual is suffering from erysipelas, and while there is great inflammation of the scalp and face, the contents of the cranium are evidently untouched, and the patient's mental condition is quite sound. In a day or two you find that the erysipelas has abated, but that there is a depressed nervous condition and confusion of ideas—the brain is evidently affected. All such occurrences are referred to under the name metastasis. Hunter treats of much the same thing, but calls it sympathy.

Now surgeons take advantage of this law of metastasis when they apply a counter irritant. Recollect what I told you of the action of an indirect irritant. It acts through the nervous system; and this hint gives us our first position when we try to frame a theory of counter-irritation.

(1) The mechanism connecting the two parts concerned must be a nervous one, and you will remember what I said about such a case as pneumonia, where the intervention of the pleural cavity between the parts affected forbid the supposition that anything else than an indirect connection through the nervous system is the basis on which the inflammation is caused at the first, and I now add is cured afterwards.

(2) This connection is through the cerebro-spinal system.

(3) What is termed a vaso-motor mechanism, which establishes the connection between the sensory and vaso-motor nerves, is the special bond of union.

(4) There is an intimate connection through this system between the superficial and the deep parts of the body; pain in the shoulder, a consequence of disease of the liver; pain under the mamma in ovarian irritation; supra-orbital neuralgia from a carious tooth.

(5) The amount of nerve force in the body and the amount of blood-supply in the body, at any given time, are fixed quantities. In other words, if an extra amount of nerve-force or of blood-supply is expended at one part of the body, it must be taken from some other part.

(6) When you have inflammation in any part, there is an alteration in the nerve-force and in the blood-supply expended at that part. This alteration consists in addition at the inflamed part, and as a consequence of this there must be subtraction from some other part.

I have now to bring these facts to bear upon the explanation of the action of a counter-irritant.

The explanation of counter-irritation which I have to offer is not held by me as proved. It is a scientific hypothesis put forward as a probable account of what takes place, and at any rate as furnishing ground to go upon in further research. These theories, which are put forward in the progress of science, have this value independent of their positive truth, that they point out what experiments should next be made for the verification or refutation of them; nor does the refutation of them prove them valueless, for it may turn out to be a most important step in the approach to the real truth. It will be your special work, gentlemen, to test the theories of those who have preceded you; and no more suitable legacy can you leave to those who will follow you than a carefully thought-out and clearly-stated hypothesis.

The germ of the following speculation is to be found in a paper by Mr. Hart in the London Practitioner, November, 1878, on "Sympathetic Pain." It is applicable to those cases in which we have no direct vascular communication between the part inflamed and that part to which the counter-irritant is applied. As I hinted before, counter-irritation may be

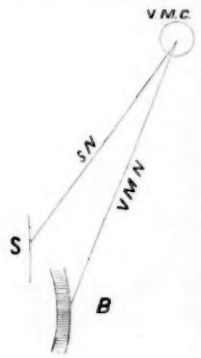
looked upon as a mode of bleeding. Now, in such a case as that of the kidney, where we have direct vascular communication between the affected part and the part to which the irritant is applied, the bleeding is direct, so to speak. By producing hyperemia in the skin and parts immediately beneath, we withdraw blood from the kidney. But in such a case as the pneumonia, where no direct vascular connection exists with the breast, the bleeding is produced by the intervention of the nervous system, and making use of the fact that hyperemia of the nervous center is associated with hyperemia of the inflamed part. So may be explained the connection between the mamma and the ovary, which we know, from their forming two of the organs of reproduction, must be closely associated in the nervous mechanism. So also may be explained why gonorrhea may be cured by giving rise to orchitis. You will understand what the surgeon does if I take this latter instance, and say that we may cure gonorrhea therefore by giving rise to orchitis.

Take one or two more examples. Not an uncommon result of gonorrhea is a bubo or inflammatory enlargement of one of the glands in the groin. In the early stages of the affection a common method of treatment is by a blister. This has one of two effects: it either causes suppuration or absorption. Which of these effects is brought about depends on the way in which the blister acts. It may act directly on the inflammatory swelling, and having itself an irritating effect will simply hasten the process; this brings on suppuration. Or it may act on the neighboring skin and cause depletion in the inflammatory area, thus acting as a counter-irritant; in this case it will produce absorption. Some time ago I tried the following experiment: A man came under my charge with a bubo on each side. I applied a blister to each, putting it directly over the one, but in the case of the other adjusting it in a horseshoe form above the bubo so as to catch the sensory nerves that came from the gland. The first suppurated, and the second was absorbed. Again, consider how a

dose of castor-oil acts when it is administered for inflammation. The active principle of the medicine is an irritant, and produces its effect on the mucous membrane of the stomach and intestines. These, on examination in the body of an animal to which castor-oil has been administered before death, are found to be congested, and doubtless this acts in depleting the congested tissue elsewhere in the body.

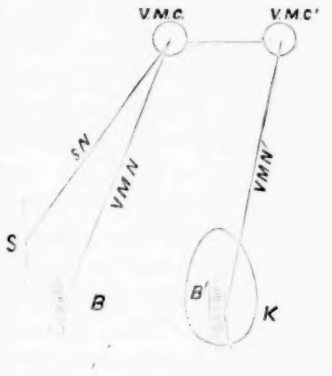
The end we have in view in counter-irritation is the relief of vascular tension, and however it may be that it is so, yet no doubt we do secure this end just as surely as if we were to bleed from the median cephalic vein. Yet we secure another end—the restoration of the secretions. By removing the hyperemia, we restore the tone of the affected organ. This when we deal with a particular organ. How it is that on the cessation of a fever all the secretive functions recover their tone at once, and how it is that by the exhibition of such remedies as castor-oil or Dover's powder this result follows, we do not know.

It is now generally allowed that a counter-irritant acts through the nervous system. The nervous mechanism is a combination of an afferent impulse along the sensory nerves of the part to which the counter-irritant is applied. The sensory nerves are in connection with a vaso-motor center; as a result of the afferent stimulus a change takes place in the vaso-motor center; the result of this change is an alteration in the conditions of the walls of the blood-vessels which are under the command of the vaso motor center.



Let me illustrate this by a rough drawing: A mustard-blister is applied to the skin at S; an impulse passes along the sensory nerve (S N); a change takes place at vaso-motor center (V M C); the result is an efferent impulse along vaso-motor nerve (V M N); the result is a change in the size of the blood-vessel in the skin (B). Dilatation takes place.

Let us now suppose that we have an inflammation of the kidney. The blood-vessels of the kidney are dilated with a slow flow of blood through them. Let the word *congestion* be used for this condition, to distinguish it from dilatation of the blood-vessels with a quickened blood flow. For this condition let us use the word *determination;* in both of these conditions there is dilatation. In the first, congestion, the function of the kidney is improperly performed, the kidney is in a state of inflammation. In the second, determination, the function of the kidney is increased, when the blood-vessels of the kidney recover their tone there is a condition which, relatively to the state of determination or congestion, is one which we speak of as anemia. The following little diagram may assist you:



The kidney (K) is in a state of inflammation. The blood-vessels (B') of the kidney are congested. A mustard-plaster is applied over the skin (S) of the loins; the result is a change in the vaso-motor center (V M C), which rules the skin vessels (B). These blood-vessels dilate. We have also, as a result of the counter-irritant to the skin, a diminution in the size of the kidney blood-vessels (B').

From a state of congestion they pass into a state of determination, with a free flow of urine, and from that to a normal condition, which is relatively one of anemia. In consequence of the mustard, a change has taken place in the vaso-motor kidney center (V M C'), which rules the vessels of the kidney.

What is the nature of this change? The vaso-motor center is an organ. An organ as regards its functions may be in one of three conditions: it may be, first, at rest; second, its function may be increased; third, its function may be abrogated. Let us consider the condition of a muscle when in these dif-

ferent conditions functionally. When a muscle is inflamed, it is congested; when active, as in tetanus, there is determination; when at rest, there is a condition which relatively is one of anemia. Take another organ, the brain: when the brain is inflamed, its vessels are congested; when active, as in thought, there is determination; when at rest, as in sleep, it is anemic. These three conditions are associated with and probably due to an alteration in the blood supply of an organ, such as a muscle or the brain. If true of the whole brain, may it not also in all probability be true of different parts of the brain—may it not be true of a vaso-motor center?

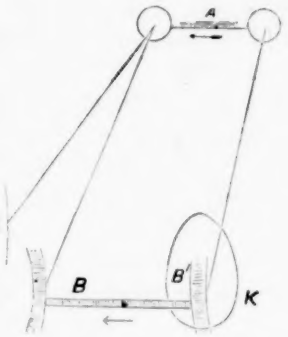
Let us now apply these conditions to the poultice in the inflamed kidney. When the kidney is inflamed the vessels are dilated, the vaso-motor kidney center has lost command; it, like the inflamed brain or inflamed muscle, is congested. Apply your poultice; it acts on the skin center; it is altered as evidenced by the condition of the skin vessels; it is congested. Where does the blood come from? From the neighboring parts—from the vaso-motor kidney center. Vascular tension is relieved; the center regains its power; the kidney vessels are restored to their normal condition.

This explanation appears to me to be founded on a rational basis. I do not know the meaning of any such term as a change in tone of a vaso-motor center; its tone or function must depend on its anatomical condition. When we remember the transient effect of a poultice, requiring its repetition or continuance, it must be evident that the anatomical change in the center is temporary in its nature. It must be the blood supply which is at fault, either of improper quantity or of bad quality. No doubt the latter cause is at work in the feverish state, but the condition is a general one. The effect of the counter-irritant is local in the case of the kidney at any rate; it can not act by directly improving the quality of the blood; it acts by changing the quantity. Remember how minute the organ is: a single minim of blood plasma drained from the vaso-motor center will have an effect on that organ equiva-

lent to the withdrawal of a couple of ounces from the biceps muscle.

Let me try and show by another drawing the nature of the change in the vaso-motor kidney center, which, when congested, is bled into the vaso-motor skin center.

There is a microscopic bleeding at A in direction of arrow, from kidney center to skin center. In the case of the kidney, the counter-irritant relieves the kidney in another way. You can inject the skin of the loins from the renal artery; there is a free anastomosis between the kidney and the skin. The skin vessels are dilated; the blood passes from the kidney B' to B the skin. There is, therefore, a macroscopic bleeding from B' to B, relieving the vascular tension directly.



It may be asked, is it necessary to theorize about the microscopic bleeding at A?—will the macroscopic bleeding at B not be sufficient to account for the good effect of the counter-irritant? Consider the lung when it is inflamed—the condition is relieved by poultices to the chest-wall. In this case there can be no direct macroscopic bleeding; there is no direct anastomosis between the vessels of the skin and the vessels of the lung. The pleural cavity intervenes. Indirectly through the whole mass of the blood, the lung may be relieved. This can not be the main factor. In this case the good result must be due to a change in the vaso-motor mechanism. The bleeding must be *microscopic*, the lung center being bled to supply the skin center.

A counter-irritant does good by relieving vascular tension. It is a variety of blood-letting. It acts in two ways:—first, a microscopic bleeding from vaso-motor center to vaso motor center; second, a macroscopic bleeding direct in some cases,

as in the kidney through the lumbar anastomoses, indirect in others as in the lung, where there is no direct anastomosis.

A dose of castor-oil acts as a counter-irritant. When castor-oil is administered, the intestinal mucous membrane is congested—the oil is directly or indirectly an irritant. The blood is drawn from other organs to supply the intestinal vessels. A purgative, then, may be considered a counter-irritant; so also a diaphoretic or a diuretic: hence their great value in inflammation.

It is hardly necessary to say that by restoring the arrested secretions, they remove the waste products which have accumulated in the blood, and by removing the serum of the blood they still further relieve the general vascular tension.

Metastasis gave surgeons the hint which directed their attention to counter-irritation, and its value in practice. No doubt counter-irritation is an artificial metastasis. The parotid is inflamed; its vaso-motor center is congested. This congestion spreads to neighboring centers. The center of the testicle is implicated; it becomes congested, loses command of the vessels of the testicle, and the testicle inflames. The parotid center is bled—the parotid inflammation is relieved.

It is hardly necessary to do more than mention other means which may be adopted in relieving and curing inflammation. I have tried to show that a counter-irritant acts by relieving vascular tension, and has, to a great extent, replaced the different methods of blood-letting by leeching, cupping, scarifying, and general blood-letting. I have also pointed out that diaphoretics, diuretics, or purgatives, act as general counter-irritants; they also relieve vascular tension. They also act by restoring the functions of the secretory organs—the skin, the kidney, and the bowel. When the pain is great, sedatives are of value—a local sedative as an opium fomentation, a general sedative as opium, hyoscyamus (of special value in inflammatory affections of the genito-urinary system), chloral and bromide of potassium. When the patient is asthenic, stimulants are indicated.

We must not forget the great value of proper diet, or as it is called "kitchen physic." So important do I consider this, that your attention will be specially directed to diet in the lectures on sick-room cookery, which will be delivered by an expert on this subject, in which you are taught how to make the different articles which are most suited for the sick-room. Every physician should be able to cook all the simples needed in a sick-room. Such a knowledge is useful; it gains the confidence of the patient and his friends. Ignorance of these things often brings the medical man into discredit. We are only able to judge of our neighbor's knowledge by our own standard of knowledge. Ignorance will not lower you in the estimation of the ignorant man. Whatever a man knows, he thinks should be generally known. The mother of the patient will not interfere with your medical theories or your medical practice, however wrong they may be; she will see that her child swallows whatever you order; she is ignorant of these things, and your ignorance (if present) will be undiscovered, but it is altogether a different affair if you order her to give the child some food, and are unable to give her the necessary instructions for its preparation. She may feign ignorance to test your knowledge. If she finds you ignorant in one thing, then she is apt to argue that you are ignorant in all. Study sick-room cookery.

The next lecture will be devoted to suppuration and the principles of antiseptic surgery. I have a reason in associating suppuration and antiseptic surgery. It is a common mistake to suppose that when suppuration occurs in a wound, the antiseptic management has failed; it is forgotten that putrefaction, which is prevented by antiseptic precautions, is only one cause of suppuration. The use, for instance, of a powerful antiseptic will cause suppuration; tension is another cause; a severe inflammation a third cause.

OBSERVATIONS ON ONE HUNDRED AND TWENTY-TWO CASES OF PNEUMONIA.

BY OSCAR T. SCHULTZ, M. D.

The principal forms in which pneumonia occurs are, as a primary (perhaps infectious) disease, croupous pneumonia; and, as a secondary affection, catarrhal pneumonia. In these two forms it constitutes a large percentage of the acute cases of disease which come into the hands of the practitioner of medicine, and contributes more than any other cause to swell his mortality list. Thus, during a four years' practice at Mt. Vernon, the deaths from these forms of pneumonia amounted to forty-eight per cent. of my mortality from all acute diseases, and to thirty-one per cent. of my total mortality. The importance of this disease, therefore, compels the attention of the physician to it, and the desire to establish in what respects these forms of pneumonia, as they are prevalent in this part of the country, correspond to and in what they differ from the views held regarding them by authors, has induced me to collect and study the cases that have come under my observation. The present paper is the result of my labor. In it I scarcely hope to present anything new, for the field has been too well worked by abler men, with better opportunities at their command; still if I can demonstrate that pneumonia, as it occurs among us in its croupous forms, presents many peculiarities stamped upon it by influences which it would be foreign to this paper to investigate, I shall rest satisfied. In addition I will endeavor to show that, by adhering to a prompt, energetic and intelligent line of treatment, better results can be attained than are generally allowed by authors.

The cases of pneumonia upon which this study is based were observed from May, 1875, to May, 1879, a period of four years; they were one hundred and twenty-two in number—twenty-eight being cases of catarrhal, and seventy-four of croupous pneumonia.

Catarrhal Pneumonia.—Catarrhal pneumonia, being a secondary disease, depends for the time of its occurrence upon the prevalence of those diseases of which it forms the complication. Of the twenty-eight cases, seven developed during a bronchitis—two of which were capillary, three simple acute, and two chronic; three followed upon measles, sixteen during pertussis, and two in consequence of diphtheria. They were divided among the twelve months of the year as follows:

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
2	2	1	—	1	1	1	8	5	—	3	4

of which the cases from June to November, both included, were, with two exceptions, from pertussis. Infancy and childhood on the one hand, and old age on the other, contributed to these cases—five being less than one year old, six from one to one and one-half years, nine from this to three years, five from three to seven years; and two—one sixty-three, the other eighty-seven years. No cause could be made out for the complication in any of the cases, excepting in two of those where the pneumonia set in after measles, and here "taking cold" could be demonstrated as a cause. The onset of the pneumonia was always marked by the accession of fever, where none was previously present, or by a rapid and high rise of the temperature where the original disease was accompanied with fever; no chill marked the setting in of the complication. The onset was sudden and severe in the measles, acute and chronic bronchitis patients, the temperature often rising rapidly to 105°; insidious, when the pneumonia developed during pertussis and capillary bronchitis. In the first of these forms in which catarrhal pneumonia presented itself, there would be, with the development of the inflammation, an almost complete cessation of the cough, the latter becoming tight, short and at times painful; the pulse became more frequent, but there would be no great change in the pulse-respiration ratio: there would be restlessness, with more or less stupor and marked dyspnea and cyanosis. This form of catarrhal pneumonia would always run a favorable and rapid course, notwithstanding that there was very considerable consolidation present in

some cases. The second form of the disease would generally begin with evening rise of temperature, the children becoming more and more prostrated in mind and body. The pertussis paroxysms would sometimes disappear completely, and if not would always be fewer and less severe than before the onset of the pneumonia; the cough becoming shorter, hacking, dry, and as a rule not painful. Gradually the intermittent type of the fever would become remittent or even continued, the temperature hardly ever, however, rising above 102°. The course of this form of pneumonia would be slow, insidious, full of relapses and the mortality high. In both forms there would be the greatest irregularity in the temperature curve; the highest points being now in the evening, and now in the morning, and recurring now at regular and now at irregular intervals in the same case. Defervescence always took place gradually, even when aided by quinia.

The remedial agents relied upon in the treatment of catarrhal pneumonia were belladonna, calomel, tartar emetic, quinia and whisky, given according to the following indications:— When the fever was high, the mind blunted, the cough dry, infrequent and perhaps painful, belladonna and calomel were given alternately every hour. If the fever remained high, above 101½°, for three or four days, a full dose of quinia was administered in the evening. This was invariably followed by an almost normal morning temperature, and moist râles in the inflamed parts of the lungs; then tartar emetic or oxymel scillæ with ipecacuanha was continued until the lungs seemed clear. In all cases with high fever whisky was given regularly every hour or two, day and night, in one and a half drachm doses, until the fever abated. The cases which developed during whooping cough, or during capillary bronchitis, were usually treated with tartar emetic and belladonna, as in the following formula:

℞ Antimon. et potas. tartr., ... gr. ij
Extr. belladon. fluid, ... gtt. iv
Pulv. glycyrrhizæ, ... gr. lx
Aquam ad., ... ℥ iij. M.

S. One teaspoonful every two hours; or where there was more febrile action, calomel and tartar emetic were alternated every hour. The whisky was in these cases replaced by a light and nourishing diet of eggs and milk; quinia was never given in these cases. In this way convalescence was usually established in the chronic form in from six to eight days.

In the catarrhal pneumonia of the aged, digitalis or tartar emetic, together with a treatment of the threatening symptoms, was employed; and if the fever was obstinate quinia was also used. With this course of treatment I lost six out of my twenty-eight cases, giving about 21.4 per cent. against 48.3 per cent., the mortality computed by Juergensen from the reports of five authors (*vide* his article on Catarrhal Pneumonia in Ziemssen's Cyclopædia, Vol. V, page 221); and the results are even more favorable than my figures indicate when we consider my record of deaths. For one was a man aged eighty-seven, in whom pneumonia supervened upon a chronic bronchitis; the second, a child of seven months, scrofulous, with habitual cough, and where the pneumonia complicated a pertussis; the third a girl, aged two and a half years, with capillary bronchitis; the fourth, a child of ten months, without teeth, puny, in whom pertussis developed during a summer complaint, and pneumonia closed the scene with hydrocephaloid symptoms; the fifth, a boy aged one year, with pseudo-membranous laryngitis, in whom the lungs collapsed on the third to fourth day, and though the laryngeal symptoms abated, death took place on the fifth day; the last a boy aged five years, in whom the diphtheritic exudation advanced upward and downward, irresistible as death itself.

Croupous Pneumonia.—Croupous pneumonia constituted 12.15 per cent. of the mortality from acute diseases, from November to May. It was one of the most frequent causes of death in aged or cachectic subjects, and formed 18 per cent. of my total mortality, and 27.6 per cent. of my mortality from acute diseases. The following table will show the distribution of the seventy-four cases observed during the several years and months:

A table showing the distribution of ninety-four cases of Croupous Pneumonia, during the years and months.

Year.	May.	June.	July.	August.	Septemb'r.	October.	Novemb'r.	Decemb'r.	January.	February.	March.	April.	Total.
1875-76	1	1	1	.....	.....	1	2	10	6	2	6	5	35
1876-77	1	.....	.....	.....	1	1	3	3	2	.....	6	6	23
1877-78	2	1	.....	.....	.....	1	2	4	2	.....	.....	1	13
1878-79	2	1	.....	.....	.....	.....	1	.....	5	8	5	1	23
Total	6	3	1	.....	1	3	8	17	15	10	17	13	94

Dividing the year into two parts, of which the one from May to November comprises the warm and hot months, and the other from November to May the cool and cold, we find that 14 cases or 14.9 per cent. occurred during the first, and 80 or 85.1 per cent. during the second. To divide the year as above into a cold and warm portion seems to be more profitable for determining the time of occurrence of pneumonia than the division into seasons; however, in this case the distribution of my cases would be as follows:—winter 42 or 44½ per cent., spring 36 or 38.4 per cent., summer 4 or 4.? per cent., autumn 12 or 12.8 per cent. The maximum frequency was in December or March, the minimum in August. Although my figures are but small, still they seem to teach two important points; first, that we have far less of croupous pneumonia during the warm and hot months of the year than in Europe; and, secondly, that our maximum and minimum frequency occurs far earlier.

Juergensen, in his masterly monograph on croupous pneumonia, in Ziemssen's Cyclopædia, Vol. V, finds from the mass of his statistical material that there is a difference in the time of the occurrence of this disease in Europe between a continental and an insular climate. The following table will show the difference between the results of his observations and my own:

A table comparing the time of the occurrence of Croupous Pneumonia.

Place.	Winter.	Spring.	Summer.	Autumn.	Maximum freqnency.	Minimum frequency.
Europe—Continental climate ..	27.3	36.2	18.8	17.7	March to May ...	Sept to Nov.
Europe—Insular climate.....	36.0	25.7	15.7	22.4	Dec. to Feb'y.....	July to August.
Mt. Vernon	44.6	38.4	4.2	12.8	Dec. or March....	August.

I am unable to decide in how far my observations conform with American experience, as the American authors whom I have been able to consult limit themselves to the general statement that this disease is more prevalent in winter and early spring.

My experience agrees with the fully established fact that neither a continuously high nor a continuously low temperature has any influence upon the causation of pneumonia, but that rapid changes in the daily temperature are a most fruitful cause. Thus during the long cold spells of December, January and February last, but few cases of croupous pneumonia came under observation; but as soon as the cold broke up, they became numerous, and more so after each new cold season than after the preceding one. Thus also the year 1878, a year remarkable for the absence of abrupt changes of temperature, was also remarkable for the few cases of pneumonia, only seven in number, observed during the same. Chilling of the body, either by exposure to the inclemencies of the weather, or from rapid changes from heated rooms into the cold open air, in my opinion acts in the same way as changes in the daily temperature, and in about forty per cent. of my cases it could be satisfactorily proved. From a careful study of the etiology of my cases, I am inclined to regard sudden and severe changes of temperature, be they a change in the daily temperature of the place or a change in the temperature of the individual brought about by a chilling of the body, as *the sole cause of a general application* in the production of croupous pneumonia. An enfeebled constitution from what-

ever cause predisposed many of my cases to an attack of pneumonia. So also our marshy, malarial country is an excellent field for the ravages of this disease. But these causes can only be regarded as links in a chain, which leads inevitably to the only general cause to be found for this disease. Thus our malarial country produces a large number of cachectic individuals, and these can not offer that resistance which alone could enable them to stand sudden changes in temperature with impunity. I am well aware that the tendency is to admit a more limited influence in the causation of croupous pneumonia to changes in the daily temperature, and to deny that from chilling of the body and exposure altogether, numerous figures being brought forward to prove that just such occupations in which the individual is most exposed present the lowest per cent. of pneumonia. But it is my experience that our farmers bear exposure but badly. Owing undoubtedly to their thin blood, they hug the stove or fire place during cold weather, and scarcely venture out to attend to the most urgent calls. If ever they are compelled by necessity to expose themselves to the inclemencies of the weather for any length of time, they soon are chilled through, and the result is an attack of "winter fever." The compilers of statistics simply forget that their figures show a certain degree of inurement to exposure, and not the harmlessness of exposure itself.

Of the ninety-four cases under observation, fifty-seven were males and thirty-seven females. The age was as follows:—From infancy to sixteen years, twenty-nine; from sixteen to forty years, twenty-nine; beyond forty years, thirty-six. One attack of pneumonia seemed to predispose to another; thus, in my four years' practice, four persons were treated twice, and in all the same side was affected; three others had had pneumonia before—two once and one six times.

Less than one-fifth of my cases presented the sthenic character; the rest were asthenic or typhoid. The sthenic cases were in young subjects, who had remained comparatively free from malaria; but even in these cases the fever had a marked

tendency to adynamia. The asthenic cases were in individuals who had been broken down by chills or bilious fever, or whose constitution had been impaired by some other cachexia or by old age. This marked tendency to asthenia, which in the majority was present from the outstart, and in the smaller number became manifest quite early in the course of the disease, was present during all years and seasons alike; and I can not say that the *genius epidemicus* exerted any influence in this direction. The *genius epidemicus* of certain years or seasons did, however, exert an influence upon the accompanying symptoms of the pneumonia; for instance, many cases observed during the present year had the coryza, tonsillar enlargement, gastric and intestinal catarrh, and the rheumatoid pains of influenza; and thus indirectly it may be held responsible for an increased mortality, simply because the tendency to adynamia may be increased by such symptoms. Thus my view of "typhoid" pneumonia is that it is a croupous pneumonia, which, in our enfeebled constitutions, runs an adynamic course. This view is diametrically opposed to that of Dr. Dickson, as expressed in his "Elements of Medicine," who makes typhoid pneumonia a distinct disease, and classes it along with typhus, typhoid and catarrhal fever, while he treats of ordinary pneumonia among the diseases of the respiratory organs. It is, however, substantially that of Da Costa, Flint, Wood, Niemeyer and Juergensen. The latter, commenting upon the report of adynamic pneumonia as it occurs at Basle, made by Liebermeister, who is inclined to accept a different etiological factor for the causation of this form of the disease than for croupous pneumonia generally, denies that there is such a factor, and then proceeds in the following words, which the importance of the subject will justify me in quoting *in extenso*:—"Leaving out of the question Basle, where the disease is endemic, and the isolated epidemics, in which this form is especially frequent, we find writers, myself included, unanimously agreeing that 'typhoid' pneumonia occurs in persons who are from some cause or other in a weakened condition. Hunger, abuse of alcohol, previous or still existing diseases,

excessive bodily or mental exertion, advanced age and unusually bad hygienic conditions, are the causes most commonly assigned. For the production of asthenic pneumonia, it is also generally necessary that there should be a diminished power of resistance to disease. I regard croupous pneumonia as on all occasions an infectious disease, and will give my reasons for this view hereafter. Entertaining this view, I prefer to suppose that the endemic form at Basle, and the epidemic forms in other places, are both due to an unusual intensity of the infecting principle. The distinction between this and the ordinary form of pneumonia is therefore, in my opinion, only quantitative and not qualitative."

This opinion of such an able and careful observer I should, from my experience, like to indorse, but only in so far as he rejects the activity of a specific "typhoid" factor in the production of "typhoid" pneumonia. His assumption of an unusual activity of the causative principle I must regard as unnecessary and uncalled for. *For it is my belief that given a cause sufficient to produce a croupous pneumonia of moderate severity, and the constitutions, such as the far larger proportion of our patients present, and the disease must necessarily run a "typhoid" course.* This conclusion, I think, is justified by the course which this disease maintained in most of my cases. Thus, taking fifteen consecutive cases, which were very carefully observed and of which I have very full notes, I find that the onset was but exceptionally sudden, more often there were marked prodromata for a various length of time; a chill, as a rule, marked the onset of the disease; after this the fever rose. The fever attained its maximum after three or four days, and then rose to 105° in two cases, to 104° in three, and ranged from 101½° to 103° in the balance. Notwithstanding this low grade of temperature the pulse-respiration ratio was but four times as 3 to 1, which on Juergensen's authority would justify a good prognosis; eight times it ranged from $^{1}/_{1}{}^{9}$ to $^{2}/_{1}{}^{8}$. The disease was localized in one lobe of one lung in twelve cases, involved the remaining parts of the same lung in two, and passed from the inferior lobe of one lung to that of the other

in one case. The defervescence was as a rule gradual; twelve hours in two, twenty-four hours in three, and thirty-six to forty-eight hours in the balance. In nine cases there was marked danger from collapse; in two it became confirmed by the fifth day, death taking place by the seventh. The duration of the fever, from the chill to the establishment of complete defervescence, was eight days in two, seven in four, five in four, four in two, and thirty-six hours in one case. These cases, which are but representative, in my opinion show that with a local affection of moderate severity I had to contend against a general condition, which brought great danger, and that this danger was from asthenia, the cause of which was to be sought for in some constitutional vice of the patients.

Complications were rare; heart disease, pleurisy and malaria were the only important ones. Of the first of these I have kept no record. Three cases were complicated with an extensive pleuritic exudation, of which one recovered promptly without any untoward symptoms; in one empyema developed, but the exudation disappeared in about two months; in the third empyema also developed, and pneumothorax was followed by death in forty-eight hours, three weeks after the termination of the pneumonic fever. In the cases complicated with malaria, a chill would appear daily at the same hour; there would be a marked increase in the fever, with an aggravation of the general symptoms, and usually with severe pain in the spleen, with marked swelling of that organ; there would never be an intermission in the fever. A full dose of quinia or cinchonidia sulph. would cause the chill to disappear, and either leave the pneumonic fever unaffected, or else in a few cases bring about defervescence also. The complication with malaria manifested itself in the same way and pursued the same course as when malaria is superadded to any other disease; and as little as we would be justified on this account of speaking of a miasmatic bronchitis or a miasmatic pertussis, would it be proper to call these cases miasmatic pneumonia, with Wood and Da Costa.

(To be continued.)

FOREIGN CORRESPONDENCE—OUR LONDON LETTER.

LONDON, July 15, 1879.

MY DEAR YANDELL: Your brother is among us, and is heartily welcomed by all your old friends. He is apparently successful in his search after knowledge and health both. I was sorry we could not get him down to the opening of the New Wing and Theater at Normansfield—the great private Institution for the Training of the Feeble in Mind. I wished him very much to be present, as there was a great gathering of prominent members of the profession, especially of alienist physicians. There were present John C. Bucknill, his co-worker at the Manual of Psychological Medicine, Hack Tuke; Crichton Browne, Orange of Broadmoor (for Criminal Lunatics), Rayner of Hanwell, Lalor of the Richmond Asylum, Dublin; Gray, of the New York State Asylum; the President of the College of Physicians, Mr. Spencer Wells, Grailey Hewitt, Braxton Hicks, David Ferrier, W. B. Carpenter, and others. The Earl of Devon presided and opened the buildings, expressing his great satisfaction with all he saw, saying that for completeness of arrangement he had never seen the like. Dr. Langdon Down, the proprietor, described in a few brief words how he had, from an early period of his studies, given his mind to the wants of imbeciles and idiots, and the best means of helping these unfortunates. In pursuit of this desire he became in time the Superintendent of the Earlswood Asylum for Idiots. After much experience there, he commenced the private institution near Hampton Court, which we visited on Midsummer day. A magnificent luncheon was spread in the private theater, and was thoroughly enjoyed preparatory to the speech-making, which, as you can suppose, was good,—Crichton Browne being first of course.

This institution is becoming rather a national affair than a mere private enterprise, and its repute is not confined to the four seas of Britain. Not only does the building itself deserve the highest commendation, alike for its construction and its

administrative management, but its situation is well selected. Dr. Down found that a high temperature was very conducive to the development of the imperfect brain, and consequently chose, as the site for his Training College, the warm valley of the Thames, close to the famous Kew Gardens, the nearest approach to a tropical climate within ready reach of London. We were all sorry when the time arrived for the departure of the special train which Dr. Down generously provided for us, as thus our pleasure was cut short. The hundred and odd guests felt, as they were whirled home, that they had taken part in a good work; and wished Dr. Langdon Down, and his able coöperator Mrs. Down, all success in their excellent undertaking. I am sorry there was not a representative from Kentucky to witness the sight and take a part in the festivities.

There are few maladies to which man is liable which embitter existence more than obstruction to the exit of the contents of the bladder. Strictures are more or less amenable to surgical measures, but hypertrophy of the prostate or vesical tumor are less manageable. Sir Henry Thompson recently read a paper before the Royal Medico-Chirurgical Society, on the subject of operation for the relief of those persons so afflicted. He said that when a patient had long ceased to be able by his own efforts to pass his water, and the catheter had to be passed very frequently and with much pain and difficulty, it might become desirable to make a permanent opening into the bladder above the pubis. This could be done effectually and safely by means of a staff, as in the high operation for stone. In these cases, however, the bladder is contracted and small, and therefore great care is requisite in performing the operation. The following directions would, he said, be found very useful in simplifying the operation: A curved hollow sound, having a stilet with a bulbous end, is introduced into the bladder, the point being made to project against the wall of the bladder just behind the symphysis. A small incision is then made in the abdominal walls into which the finger is inserted, and the exact place in the bladder wall perforated; care being taken to see that the incision

L. of C

is not too large, so as to avoid the escape of the urine by the side of the tube introduced. A gum elastic tube, having a shield like that of the ordinary tracheotomy tube, is then passed into the end of the sound after the stilet is withdrawn, and so passed into the bladder. The relief thus afforded is very great, but the operation has only been adopted in extreme circumstances and to render the remainder of life tolerable. Great care is required to keep the instrument clean. In three cases of hypertrophied prostate and in one of villous cancer, he had performed this operation. He concluded by proposing the following question:—May it not be desirable to adopt such a procedure in some instances at a somewhat earlier period in the history of such cases?

Some little discourse on some special maladies of woman may not be out of place or uninteresting to your readers. Dr. Ernest Herman, the assistant obstetric physician to the great east end hospital—the London—has recently published some cases of fibroids of the uterus treated by ergot, or rather its active principle, sclerotic acid. In consequence of the difficulties in the way of administering medicines hypodermically to hospital out-patients, many of whom live at some distance, the drug was mostly administered by the mouth. In one case there was a firm, tolerably symmetrical and rounded tumor in the lower part of the abdomen, reaching to the umbilicus. The patient was anesthetized and the tumor was found to be uterine and movable with the cervix. She was put upon steel, with sulphuric acid and sulphate of magnesia. Subcutaneous injections of sclerotic acid (half a grain) were made daily over the region of the tumor. After the injections were commenced, the tumor began to steadily diminish in size; in a fortnight there was room for two fingers betwixt the summit of the tumor and the umbilicus. The decrease in size was most rapid at first, and afterwards became slower. The patient left the hospital at her own request before the treatment had been as long continued as could be desired, being so much better from the treatment.

In another case, though there was no reduction in the size

of the tumor, there was marked and persistent improvement in the symptoms. Here there had been severe hemorrhage, preceded by long-continued menorrhagia, in a sterile married woman. A small firm tumor, about the size of the fundus uteri, was found in front of the uterus, rather to the right. After two months of the remedy the normal menstrual periods were almost reached, and there was no leucorrhea. After four more months the flow was regular but profuse. Six months later the catamenia were regular but scanty, the tumor remaining unaltered.

In the third case, there was a long history of uterine troubles, supplemented by aortic regurgitation. A firm, hard nodular tumor, which was movable, was found in the uterine wall. After three months' treatment the hemorrhage was very much lessened, and the pain was much diminished.

In a fourth case, the medicine was taken irregularly for seven months, the patient several times absenting herself and then returning for the medicine. The amount of loss was very much reduced by the drug. It was this which sent the patient back to the hospital for her medicine.

In a fifth case there were hemorrhage, dysmenorrhea and leucorrhea, and a long history of uterine troubles. Here also, under most unfavorable circumstances, much relief was afforded. The impression left upon the mind is this:—that so much benefit followed the treatment that there is much hopefulness remaining that more regular and persistent use of ergot will lead to even better results than those attained by Dr. Herman. He assigns no reasons in his report of the why of his stopping the drug, and does not even hint at any bad effects arising therefrom.

Dr. Tilt writes on Uterine Inflammation at the change of life. He says that from the thirty-fifth to the forty-fifth year of her life, the sexual life of woman is less intense than before: "the married have fewer children; the unmarried think less of marriage. Perhaps this diminution of sexual energy accounts for a corresponding decrease in the number and the intensity of inflammatory uterine affections." He thinks,

however, that many women enter upon the change of life with uterine diseases that have either been undetected or been but imperfectly cured; and that all such disease is sure to be aggravated and brought to light when the menopause is reached. When the general health fails local disease is sure to manifest itself, with its usual troublesome symptoms. He holds strongly that all diseases existing before the menopause is reached should be treated on their merits, "for they will be made more difficult of cure by the dodging time and by cessation." He thinks that late pregnancies exercise an injurious influence. He says:—"Puerperal involution proceeds at a slower rate, and is oftener defective in women confined during the last decade of reproductive life; and I believe that not unfrequently a womb that has not been able to effect puerperal involution, is called upon to work out the ultimate uterine involution of the change of life. I am convinced that 'the dodging time' is sometimes protracted to unusual length by the fact of the womb having thus remained considerably too large after the last pregnancy, and without other disease than hyperemia of its internal surface, and not always that." And this may all go on while the cervix is healthy and even smaller than usual. In such cases he has often passed wax bougies into the uterus from four to five inches, indicating a state of enlargement or subinvolution. Very frequently these patients are obese. In such cases he uses a combination of ergotine and nux vomica. "In other women, in whom the womb is in a state of defective involution at the beginning of the dodging time, flooding is the frequent symptom of more acute hyperemia, or of internal metritis, brought on or aggravated by the stoppage of an habitual outlet to pelvic congestion. This is not all: inflammation is just as much a bar to the ultimate involution of the womb at the change of life as it is to the right progress of puerperal involution of the same organ; and when, at the dodging time, an enlarged womb becomes inflamed, there is little chance of its size decreasing till after cessation. This enlargement of the womb, as a not uncommon condition at this epoch, explains why some women

have an outflow of serum or muco-pus at some stage of the intermenstrual period—generally inodorous, but I have known it to be offensive, and greatly to distress a patient. Half a teacupful of pus or bloody pus may be also suddenly evacuated, and give the idea of an abscess, whereas the occurrence clearly points to internal metritis." The appropriate measures for such subinvolution is to diminish the uterine congestion or inflammation, and to maintain a free passage through the cervix for the uterine secretions. These purulent, or hemo-purulent discharges may take place at rhythmical intervals, corresponding to the menstrual periods.

The Harveian oration, at the Royal College of Physicians, was delivered this year by Sam. Wilks, and was deserving of the man as well as of the occasion. He described the form of thought of the Elizabethan age, when Bacon threw off the yoke of Aristotle and Plato, and not long after Harvey found force of will to put aside his Aristotle and his Galen, and search nature for himself. After referring to the mechanism of the cells of the common bee, the relation of the lightning to the effects of rubbing a piece of sealing-wax, he said:—"The glories of the bow in the skies, though gazed at for ages, had never suggested the interpretation of the spectrum; but it was by observation of a ray of light passing through a hole in a window of a small room that the meaning of the rainbow was revealed. So in physiology, we are apt to forget that it is by slow work, step by step, and often quite apart from the subject whose interpretation we seek, that we obtain fruitful knowledge. No contemplation of the human eye would have suggested the camera; but the building up of the camera by a series of inventions explained the mechanism of the eye. We have endeavored to teach the function of the tympanum and its chain of bones by the knowledge in our possession; but we now think that this was insufficient, since the physicist has discovered the intimate relation between electrical and sonorous vibrations in his microphone. I think I am right in saying that no piece of mechanism was ever

framed in imitation of a straw of wheat or the hollow thigh-bone; but when, by a series of experiments, the engineer discovered that with the least material he could gain most strength by making his support as a hollow girder or tubular bridge, then we applied his discovery to interpreting the culm of grass or the human os femoris. No contemplation of the nerves ever excited man's imagination toward the fabrication of an electric telegraph; but, on the other hand, the insulated wire, the result of much labor and thought, was found to have its counterpart in the nerves, whose component parts it then explained. The action of salines and colloids on the human body was learned by means of parchment and tubes in the laboratory. These facts should point out to us how fruitless it is to attempt to understand complex structures and phenomena before we have arrived at the necessary steps for their solution."

Reviews.

Lessons in Gynecology. By WILLIAM GOODELL, A. M., M. D., Physician in charge of the Preston Retreat, Professor of Clinical Gynecology in the University of Pennsylvania, etc. With eighty illustrations. Philadelphia: 1879.

The number of works upon gynecology now rapidly issuing from the press is evidence of the deep interest which has been awakened on the subject, and certain proof that it is making rapid advances.

The present candidate for professional favor differs somewhat from the ordinary character. In a very brief preface, the author disclaims for the work the character of a treatise, and states that it is made up of clinical lectures and journal articles, which have been thrown together in book-form; and that it is the outcome of "a busy life and a slow pen," rather than of a serious and careful attempt at authorship. This mode of book-making entails certain defects as a necessary consequence, and we find no exception to the general rule in the present instance. Under such circumstances there must be a great inequality, both in the space devoted to the different subjects and the manner of their consideration, and an incompleteness in regard to the whole. When to this is added want of care in proof-reading—a fault more of the publisher than the author,—there can not fail to be felt a deep regret that the little more care and effort necessary to make an unexceptionable book was not expended.

Having said this much our fault-finding is at an end, and we have the far more pleasant task of calling attention to some of the good points and excellent features of the work. It is essentially clinical in character, and why the term "Lessons" should have been used rather than "Clinical Lectures," does

not very clearly appear. The subjects are mostly treated of, in connection with cases, the history and details of which are given; and, with one or two exceptions, there is an absence of disquisition upon the pathological features of diseases—symptomatology and treatment being very fully considered. The book is, therefore, an extremely practical book, which is what might have been expected from the long clinical experience of the author, and his well established reputation as a teacher. His judgment and skill in the latter capacity is shown upon every page; and if we mistake not, the student and inexperienced practitioner will find here "lessons" of which he will at once appreciate the practical value. The various steps of operations are carefully described, and measures of treatment minutely indicated. We may also refer to the number of illustrations of instruments which is given. This is a point too frequently overlooked by authors, and especially in regard to new instruments. Daily use has begotten familiarity, and they forget that the vast majority of their readers live far out of reach of instrument dealers. Thus, we could not refer to any "treatise" containing a cut and description of Paquelin's cautery, such as given here; and it is not so very long ago that, for want of such information, we were obliged to make quite a journey in order to see the instrument and ascertain if it would serve our purpose in an operation.

To these features of the book must be added a decided originality, which was to have been expected from the amount of experience enjoyed by the author, and the character of his contributions to the medical press. The work is no mere transcript of the opinions of others, or statement of the generally received practice in the various diseases of which it treats. Operations and measures of treatment are modified and varied according to the dictates of his own judgment and experience, and do not generally suffer by the modification.

The work covers fairly well the whole field to which it is devoted, without being exhaustive. It is unnecessary to enumerate the chapters and give their headings, but we will refer

briefly to a few points. After a preliminary lesson on instruments, and in which we miss instructions as to *modes* of examination which were to be expected, there are two chapters on diseases of the urinary organs, which are brief but useful. As one of them is on caruncle of the urethra, it is to be hoped that it will aid in directing attention to this quite frequent disease, so often overlooked because its symptoms are misunderstood. To these follow two on fistulæ of the female genital organs and laceration of the perineum. In the former we commend the diagram on page 44, illustrating the different forms of fistula, as excellent; and we also find mention of the rare forms of uretero-vaginal and uretero-uterine fistulæ, with reference to the operation of one of the editors of this journal.

Lesson VIII is all too brief for the subject of which it treats—the Local and Constitutional Treatment of Chronic Metritis and Endometritis. Nevertheless it will be found as useful as any chapter in the book. For local application to the diseased uterus, the author places at the head of the list a combination of iodine, chloral and carbolic acid, first proposed in this journal by Dr. J. P. Thomas, of Kentucky, May, 1877. In treating this class of cases, it will be seen that he does not trouble himself very much as to whether it is a "cervicitis" or a "metritis;" but in every case carries the solution used "up to the fundus of the womb whenever the internal os permits it to pass." His reasons for this are:

"(*a*) If the mucous coat is alone involved, the symptoms often fail to inform me how far up the disease has extended. (*b*) Owing to the absence of any submucous connective tissue, the inflammation of the mucous membrane must sooner or later more or less involve the parenchymatous structure, and this must be avoided at all hazards. (*c*) Whenever the internal os is sufficiently patulous to admit the armed applicator, I accept this fact as an evidence that the disease is not limited to the cervix. (*d*) By this practice, in a measure empirical, I err on the safe side, and obtain far better results than I did when limiting my applications to the cervical canal."

He teaches the use of two remedies which are not generally

taught or accepted by the profession, and indeed are sometimes denounced. We allude to intra-uterine injections and the application of fuming nitric acid. The former he has resorted to of late in obstinate cases, notwithstanding the well known objections, "with much satisfaction," and as to the latter:

"When granular erosion is associated with a gaping or an everted os, there is no better treatment than by this acid. . . In menorrhagia springing from a congestion or from a subinvolution of the womb, in cases of wombs too tender to bear the pressure of a hard pessary, in obstinate leucorrhea, it does much good when boldly carried into the uterine cavity. I am very partial to this escharotic, nor have I yet found that its use is followed by symptoms more urgent than those produced by the milder caustics."

Due caution is of course inculcated as to the use of these powerful remedies, yet

"I have come to the conclusion that he is the most successful gynecologist who is the most plucky, and that, no matter how severe or how mild the treatment of uterine disorders, the percentage of accidents will be about the same, and that a very low one."

Among several passages here of great practical value, we can only find room for the following:

"I am more than ever impressed with the fact that in general the caustic applications are made too continuously for nature to have fair play, and that irritation and congestion are actually kept up by too short intervals of rest. It is therefore my habit, after making from four to six applications, each a week apart, to send my patient away just before a catamenial period, with directions not to return until two such have passed. Not only will much be gained by this intermission in the treatment, but an opportunity for impregnation is thus given."

In the constitutional treatment of uterine diseases quite a selection of formulæ is given, and brief notice of the most difficult task of all—"to distract patients from self, and to make them forget that they are invalid!" Would that he had told us how to do it! When the author comes who tells us how to deal successfully with this feature of these diseases,

who teaches us how to stop the daily repetition of the "old, old story" of aches and pains, the magnifying of trivial ailments, the watching of symptoms, and the nursing of troubles, he shall have a golden statue in the temple of Esculapius!

The comparatively new subject of laceration of the cervix is duly considered, and the operation for it fully described. While recognizing the importance of this lesion, and pointing out the liability to overlook its existence, still it is not magnified beyond its merits; nor is every woman who has an ununited rent of the cervix believed to be doomed to sterility or to hopeless invalidism.

There are two chapters of this work which we believe to deserve especial commendation. The first is on Vegetations of the Endometrium, a very frequent and one of the most frequently overlooked causes of metrorrhagia and menorrhagia. The existence of an *endometritis hyperplastica* is not recognized by many of our writers; while in regard to the use of the curette, the only efficient and reliable mode of treatment, there is a wide difference of opinion among standard authorities, some denying it a place in the armamentarium or even denouncing it. Under these circumstances we are glad to find a just view of the importance of this condition, with a full consideration of the subject, extending to the pathology as well as the treatment. In the latter, however, we miss any notice of Emmet's curette forceps—an excellent instrument for those not practiced in the use of the curette, or those afraid of it from the exaggerations of its opponents.

The other chapter is on Spaying for Fibroid Tumors of the Womb and for other Disorders of Menstrual Life. We must quarrel with the term "spaying," which is repulsive from its association with very low animals. Intended to escape the incongruities of "normal ovariotomy," it is no improvement, and we have here one of those philological difficulties which seem to be insuperable. How many attempts have already been made to replace "ovariotomy" with a more precise or an absolutely correct word, and yet without avail. In this chapter is found a table giving the number of times this oper-

ation has been performed, the name of the operator, and the results. It would be difficult, if not impossible, to find elsewhere complete tabulated statements of, first, the cases in which menstruation continued; and, second, of those in which it ceased after removal of both ovaries.

The relative and positive value of Dr. Battey's operation has not yet been decided. The author thus states his views:

"I am by no means sure that when the question comes to lie between the removal of the ovaries and the enucleation of a fibroid imprisoned by an undilated os uteri, the former will not be the operation of the future. When, however, vaginal enucleation is impracticable, and the question is reduced to one of three, namely, spaying, or enucleation by gastrotomy, or the extirpation of the invaded womb, there is to my mind but one answer, and that one in favor of spaying."

At the close of the volume, we find the address delivered by the author as President of the American Gynecological Society at its last session, on "Nerve-Tire and Womb-ills," and two or three hygienic chapters of great interest. The "Practical Hints for the Prevention of Uterine Disorders" are of great value, especially those relating to puerperal convalescence, although we could not conscientiously join in an attack on the obstetrical binder. The "Relation which faulty closet accommodations bear to the Diseases of Women" is an unsavory subject, but none more important comes within the domain of domestic hygiene, and no physician can fulfill his duty as guardian of the health of the family without giving this matter attention. In regard to the abuse and unnatural use of the sexual relations, the cheats and frauds of nature in regard to conception and child-bearing, the author is plain, outspoken, and justly severe. The whole subject is handled vigorously and without gloves, and there is some good reading for any of the profession who may be tempted to prove recreant to the sacred trusts which are in their charge. We can not do better than give a specimen:

"I dare any political economist to show me one innocuous expedient whereby conception can be avoided. I challenge him to

name a single preventive plan which will not do damage either to good health or to good morals. Even natural sterility is a curse; show me a house without children, and, ten to one, you show me an abode dreary in its loneliness, disturbed by jealousy or by estrangement, distasteful from wayward caprice or from unlovable eccentricity. Depend upon it, gentlemen, there are no thornless by-paths by which man can skulk from his moral and physical obligations; no safe stratagems by which he can balk God's first blessing and first command. Therefore, as hygienists, if not as moralists; as physicians, if not as patriots; as guardians of the public health, if not as philanthropists, I charge you to frown upon such practices, and take a bold stand against them. Else see to it that in the end you are not held to a strict account for the knowledge you have this day gained."

We heartily commend this work for elementary instruction. We can mention larger, more thorough and exhaustive books, but we know of none more useful or more reliable. J. C. R.

Diseases of the Bladder and Urethra in Women. By ALEXANDER J. C. SKENE, M. D., Professor of Diseases of Women in the Long Island College Hospital, etc. New York: William Wood and Co., Great Jones Street.

Dr. Skene has laid the American profession under obligations by preparing this work. He has entered a field almost unoccupied, at least so far as works in English are concerned. He not only has diligently collected knowledge from others, but has also made important contributions himself to the pathology, diagnosis, and therapeutics of the disorders of which the book treats. There are few practitioners who do not meet every month or week with troublesome cases of urethral or of vesical disease in women; and they will find in this volume a treasure-house of valuable information.

Having said this much in commendation of the book, and without attempting any analytical review of it, we have a word or two of criticism. The *form* is objectionable. Why

it should be given the profession as lectures, with occasional colloquial and inelegant expressions, instead of a series of chapters, we can not imagine. Then, too, the *quantity* of the work is not to be commended. Too much space is given to the consideration of matters of anatomy and physiology which practitioners ought to have already learned, and then there is a classification of diseases sometimes painfully minute, or again purely arbitrary, *e. g.*,—what will western and southern practitioners think of the existence of malarial neuroses of the bladder? Will they not attribute the symptoms claimed by Dr. Skene for these disorders, to transient derangements of urinary secretion, doubting if not denying such neuroses? We sincerely believe the practical portion of the book could be placed in much less space than in three hundred and fifty pages.

Again, there are frequent evidences of careless proof-reading, and this is shown not merely in misspelled words and syntactic errors, but especially in the use of capitals where they ought not to be. Illustrative of the last fault take these two sentences found on p. 268:—"From the time of her marriage she began to suffer from painful menstruation and Uterine Leucorrhœa." "She had an Anteflexion of the Uterus and Cervical Endometritis." In the first sentence painful menstruation is quite as much entitled to capitals as Uterine Leucorrhœa, but of course neither should have them. In the second sentence, of ten words, there are five capitals, four more than proper.

The book has at least occasional rhetorical faults. The following is a remarkable sentence, found on p. 251:—"Joints of tape-worm, the Ascaris Lumbricoides and the thread or seat-worms have also been found here, entering either through a fistulous opening existing between the bladder and intestine, or by crawling in through the urethra." How the joints of a tapeworm could crawl we do not understand. Why not, too, simply say a vesico-intestinal fistula instead of "a fistulous opening existing between the bladder and intestine," using three words instead of nine! And why not omit "by crawling in" in the last clause of the sentence! No one could

possibly imagine that worms would either jump, trot, gallop, pace, swim or fly in. Probably the book could be diminished one-third by omitting unnecessary words, and replacing all periphrases by direct expressions.

We know we have been pointing out minor faults, minor especially in comparison with the great value of the information and instruction given by the book; but still they are faults—faults which, if they do not corrupt public taste in the profession, at least do not improve it. The book is a good one, invaluable indeed, but we believe it can be made much better: just criticism is a duty alike to the author and to the profession.

The National Dispensatory—Containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines, including those recognized in the Pharmacopœias of the United States and Great Britain. By ALFRED STILLÉ, M. D., LL. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania; and JOHN M. MAISCH, Ph. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. With two hundred and one illustrations. Philadelphia: Henry C. Lea. 1879.

We have no space for a review of a book of more than sixteen hundred pages. Nevertheless we must say a few words of the character and scope of this work. The names of its authors, Dr. Alfred Stillé, one of the most eminent of living physicians and medical teachers, and Professor Maisch, almost equally as well known to druggists and pharmacists as that of Dr. Stillé is to doctors, furnish ample guarantee of scientific accuracy, of thoroughness and of learning.

Convenience of reference is secured by an alphabetical arrangement of subjects. Detailed botanical descriptions, which not one doctor in ten could understand, and not one in a hundred would care for, are omitted. "With regard to Pharmacodynamics, there is presented, for the first time in a Dispensatory, a succinct account of the physiological action of medicines. The results of experiments are stated as clearly

as possible, and occasionally in the theoretical language of the day; but, as a rule, terms have been employed whose meaning is not likely to become obsolete or unintelligible. Whenever it seemed possible, an attempt to apply the results of physiological experiments to therapeutical uses has been made; for although the two fields of inquiry may not be so organically connected as to render the former a guide to the latter, it is, nevertheless, true that a scientific explanation of the curative powers of medicines must be sought in the results of their experimental operations upon the animal functions."

A therapeutical index, a novelty in dispensatories, makes reference on the part of the doctor very easy. The work is a storehouse of invaluable knowledge, and the physician's library can hardly be complete without it.

Hints in the Obstetric Procedure. By Wm. B. Atkinson, A. M, M. D., Physician to the Department of Obstetrics and Diseases of Women, Howard Hospital, Philadelphia; Lecturer on Diseases of Children, Jefferson Medical College. Philadelphia: D. G. Brinton.

Dr. Atkinson seems to have studied the best obstetric authors diligently and discreetly, and from their extensive writings drawn lessons of wisdom and instructions of value for two classes of practitioners. The young man without obstetric experience will find in these hints a reminder of many good points remembered—perhaps only dimly—from his general studies, and the mixed jumble of his college instruction. It will prove a real light and a consolation to him to find in these few pages an intelligent summing up of what he is to do when called to a case of labor. Also it will discover to him one recess or more in his mind where the illumination of obstetric knowledge has not been complete or has faded, and he can at once resort to some suitable treatise and enlighten the dark corners.

Likewise certain practitioners who have had no inconsiderable experience and been years in gaining it, but who have

not kept abreast with advancing thought and polemic literature in obstetric channels, will find themselves refreshed and enlightened by a perusal of Dr. Atkinson's Hints.

For the purposes indicated the book is well adapted and will do good service, and for the thoroughly posted, the leaders in obstetric science, it was not written. J. F. H.

Paresis of the Sympathetic Centers from Over-Excitation by High Solar Heat, long continued and suddenly withdrawn, etc. So-called Malaria: its Etiology, Pathogenesis, Pathology and Treatment. By CHARLES T. REBER, M. D. St. Louis: George O. Rumbold and Co. 1879.

The scope and tenor of this little volume may be understood from this quotation, found at the end of Chapter VIII:

"It appears unnecessary to multiply words on these points.

"1. That the temperature of the body is governed by the sympathetic nerve-centers as a temperature center.

"2. That in order to the healthy performance of this function, these nerve-centers must possess a certain degree of tone (potential energy).

"3. That long-continued high atmospheric temperature, especially when saturated with aqueous vapor, produces over-excitation of those heat-governing nerve-centers, resulting in a depression of their normal potential energy.

"4. That the abnormal state of those centers is the cause of all the diseases for a long time past known by the term malarial or malarious diseases."

If any one accepts all this on its mere announcement, very well; but if one does not, it is not worth while to search Dr. Reber's pages for proof of its truth, for the demonstration is not in his book. His therapeutic measures are those in common use, but he attempts to twist the *rationale* of their operation to accord with the propositions quoted above. Taken altogether the book is not bad enough to do any mischief, nor good enough for a busy doctor to occupy time in reading it.

J. F. H.

Clinic of the Month.

THE LOCAL TREATMENT OF INFANT DYSENTERY.—The local treatment requires the use of enemata. Their indications vary. They are to evacuate the bowels, or to reduce the irritability of the diseased intestine, or to accomplish an actual cure. These indications can not always be fulfilled separately; sometimes two, sometimes all three can be fulfilled at the same time. The nature and quantity and the temperature of the liquid to be injected depend in part on the end aimed at, in part on the irritability of the individual intestine. Sometimes the bowel objects to the introduction of small amounts; sometimes, however, large quantities are tolerated very easily indeed. To introduce small amounts, the selection of the syringe is a matter of indifference. To inject large quantities, however, undue pressure and local irritation must be avoided. Thus the fountain syringe alone will answer; it ought to hang but a trifle above the level of the anus, say from six to twenty inches. The temperature of the liquid is not always a matter of great importance. Some recommend the injections to be ice-cold, some, however, tepid; both are frequently recommended as panaceas. But the practitioner will soon ascertain that some bear and require the one, some the other, some indeed very hot ones.

In my experience, for the large majority of patients tepid injections answered best. Not seldom is the intestine in such a condition of irritation that even small quantities of a very cold fluid are expelled at once. And again, there are cases in which enormous amounts of either cold or warm water are readily received. To accomplish the purpose of evacuating the bowel, plain water will often suffice, but one per cent. olutions of salt in water will usually prove more acceptable.

Additions of bitartrate of potassa, or castor-oil, have proved so uncomfortable in my hands that I have discarded them long ago. However, when the secretion of mucus on the rectal mucous membrane was very large, one or two per cent. solutions of bicarbonate of soda answered very well indeed. For the purpose of clearing the intestines, either of feces or the morbid products, a single enema is insufficient. It ought to be repeated several times daily. When much mucus is secreted and tenesmus intense, it may be applied after every evacuation. In many cases the substitution of flaxseed tea or mucilage of gum acacia will prove advantageous. I had to continue them for weeks for both their evacuating and alleviating effect. When, however, the latter effect alone is aimed at, small quantities will usually suffice. An ounce or two of thin mucilage, or starch-water, or flaxseed tea, with tincture of opium, or better extract of opium, prove very comforting. Glycerine in water has been recommended for the same purpose. The former alone, or but slightly diluted, irritates, nay cauterizes. It will require close judgment and individual experience to ascertain the degree of dilution.

When a local curative effect is aimed at, injections of small quantities will be found deficient. As the local lesions are often extensive, the amount to be injected must be pretty large. Almost always astringents are required. Sulphate of zinc, of alumina, subacetate of lead, nitrate of silver, tannin, chlorate of potassa, ergotin, salicylic and carbolic acids, and creasote have been recommended. Of the more common astringents I prefer alumina or tannin in one per cent. solutions. Creasote answered well in solutions of one half of a per cent. Salicylic acid resulted more frequently in pain than in benefit. Carbolic acid in solutions of one half of a per cent. has proved very beneficial, but I have learned long ago to be very careful in regard to its administration when I observed a case of poisoning with that substance. A young man, suffering from chronic dysentery, was to be treated with injections of carbolic acid in a one per cent. solution. As it was expected that but a limited quantity would be tolerated

before expulsion, no amount was specified. The intestine, however, being in a paralytic condition, received enormous quantities, until finally ten drachms (40.0) of crystallized carbolic acid disappeared in his bowels. That want of caution came near destroying the patient.

Injections of nitrate of silver may prove very useful in cases not quite acute. Before the solutions of a quarter of a per cent., or one, or two per cent. are injected, the intestine ought to be washed out with warm water without salt. After the injection has been made, it ought to be neutralized with a solution of chloride of sodium; it is still better to wash the anus and the portion of the rectum within easy reach with that solution before the medicinal injection be made. For even the mildest solutions are liable to give rise to intense tenesmus, when no such care has been taken.

In chronic cases, where the ulcerations are but few, or in the lower portion of the bowels only, small quantities suffice. But more acute cases and extensive lesions require large injections, the patient being on his side, or in the knee-elbow position. In a number of cases, both mild and severe, where neither the usual astringents nor nitrate of silver appeared to answer, I have been very successful when resorting to injections of subnitrate of bismuth. The drug is mixed with six or ten times its amount of water; of this mixture from one to three ounces (30.0–100.0) are injected into the bowel which has been washed out previously, twice or three times daily. The success was satisfactory, though a large portion of the injected mixture was soon expelled. (A. Jacobi, M. D., in Amer. Jour. Obstetrics, July, 1879.)

The Seton in Chronic Patellar Bursitis.—Dr. J. A. Austin, (Lancet, July 12,) writes:—There are two principal methods of treating the disease known as chronic patellar bursitis, or chronic housemaid's knee—viz., the *uncertain* and the *certain* method. Of the latter, one variety, I believe, consists in getting rid of the effusion in the bursal sac, and, by adopting measures for keeping the knee-joint extended, to

prevent the influence of pressure, tension, or friction involved in the frequent act of flexion, which, I understand, are the great perpetuators of the mischief in these and similar cases. There is, however, another variety of the certain method, which, though it may be said by some that it is neither so elegant nor convenient as the former, is yet as expeditious as any, and certainly can not be surpassed for its certain and satisfactory results. I allude to the treatment by the seton. To enter into a few details. The seton, composed of a double silk thread moistened in weak carbolic oil, is conveniently passed through the same canula which draws off the fluid, and in certain circumstances, where the avoidance of pain is urgently required, the ether spray will be found a great boon. Too small a trocar is not to be selected, or the apertures will be apt to close up and obstruct the discharges. To have to enlarge them afterwards would be exceedingly disagreeable. A pad of lint, moistened also with carbolic oil, covered with gutta percha tissue, and the whole secured by a few turns of a bandage, is both agreeable to the patient and helps to maintain the patency of the apertures. The seton should be drawn every morning, in order to present a fresh portion of it each time to the suppurating interior, and the pus encouraged to ooze out by frequent and gentle pressure with the fingers. In five or six days the seton may be withdrawn, and after five or six days more of rest the patient may be allowed to walk about. Should any congestion or weakness be left behind, it is effectually overcome by the local use of the cold douche. Iodine, blistering, pressure, and even simple tapping, are very uncertain remedies, and their employment in nearly every case is merely a source of additional annoyance to both the patient and the practitioner.

Chloride of Sodium with Corrosive Sublimate Injections in Syphilis.—In the *Memorabilien*, July 9, 1879, Dr. G. Matthés speaks of the disadvantages of the hypodermic injection of a simple solution of corrosive sublimate in syphilis, on account of the abscesses and painful swelling which often fol-

low. For two years, in Vienna, he has assisted at the Polyclinic of Dr. Henry Auspitz, and gives their experience in the use of corrosive sublimate in solution with common salt. Dr. Auspitz mixes the salt with the corrosive sublimate, and selects the buttocks as the best point of injection. There he inserts the needle of the syringe, penetrating the gluteus maximus, using a Pravaz's syringe-full of a solution every second day, after the following formula:

℞ Hydrarg. bichloridi, ... grams 1.
Sodii chloridi, ... " 5.
Aquæ distil., ... " 100.

This solution is almost entirely painless, and Dr. M. has neither in Vienna, nor in thirty-five cases in private practice, seen any harm from its use. In the thirty-five cases, altogether he used about eight hundred and fifty injections, and never saw an abscess result, and the swelling after the injection was much less and disappeared a great deal sooner than in the use of the corrosive sublimate alone. The injection was only used every second day, so as not to cause salivation. Generally twenty to thirty injections were sufficient to effect a cure.

Blistering as a Remedy.—Dr. H. S. Anderson, in his Harveian Discourse, Edinburgh Medical Journal, June, 1879, speaks as follows of the efficacious use of blisters:

Another remedy, which I fear is somewhat unduly neglected also, is counter-irritation by means of blistering; and I think I have observed in some young practitioners an approach to something like terror when blistering is spoken of as a remedy that may frequently be used. Certainly, as regards children's diseases, there is more of this fear than there should be. It has frequently, for example, been my experience to see children, in consultation with a younger practitioner, when blistering in acute head affections had never been dreamed of. In mostly all acute inflammatory affections of the brain, tubercular or not, in children, I am strongly of opinion that after shaving the head the application of blistering fluid has a most

rapid and satisfactory effect. Inflammatory attacks also of the peritoneum and chest in children are often controlled by blistering, although the size of the vesicatory and the length of time applied must be carefully considered. And in the rheumatic affections of the joints in adults, repeated blistering has often the happiest results. For many chronic conditions, also, counter-irritation has always held a high place in my list of remedies. In chronic tubercular affections of both chest and abdomen I think occasional and repeated blistering is frequently beneficial, and also in chronic and obscure head and other affections of the nervous system. For example, a blister over the roots of the nerves in herpes zoster often relieves the neuralgic pain so generally present, and often so difficult to get rid of. In diphtheritic paralysis, also, blistering the nape of the neck, and even down the spine, often expedites cure in a wonderful way. In the uterine or ovarian pain so often complained of in the left side, there is no better remedy sometimes than a succession of fly-blisters, and the tenderness of spinal irritation is frequently relieved, if not got rid of, by the same means. In chronic effusions the use of blisters is still fully acknowledged, and do not, therefore, call for special mention.

The Various Therapeutic Uses of Calcium Phosphate. While phosphate of lime in an insoluble state is not absorbed in its passage through the alimentary tract, when dissolved in lactic acid, under the form of a lacto-phosphate, it stimulates nutrition in both adults and infants. In the latter the bodily weight regularly and progressively increases. In the case of the bones, lacto-phosphate of lime increases their hardness and favors consolidation in cases of fracture. In rickets, M. Dusart found in every case, in which the diet, though sufficient in quantity, was unsuited to the digestive organs, the addition of lacto-phosphate of lime caused rapid improvement. The observations of Dr. Paquet in Parisian hospitals, in cases of wounds and fractures, confirms its usefulness where there are deep-seated disturbances of nutrition; among the results fol-

lowing the use of the remedy being almost uniformly a shortening of the period required for consolidation.

Among pregnant women, easy gestation, constant appetite, a well developed and vigorous child, a rich and abundant milk supply, are the results as observed by M. Dusart accompanying the employment of calcium phosphate in this form.

Lehman's experiments on young animals with food deficient in phosphates show sufficiently well the injury which may be inflicted thereby upon the development of all their tissues, but especially the osseous; while the superior value of lime phosphates, as compared with potassium phosphates, was likewise established. (New Remedies.)

Successful Reduction of a Strangulated Congenital Inguinal Hernia.—W. G., born April 10th, was the subject of double congenital inguinal hernia. For a month the child enjoyed good health, and all its functions were properly performed. On May 15th, however, the left hernia showed symptoms of strangulation. Twenty-four hours after the child was taken ill, I was sent for, and found the scrotum enlarged and bulging on both sides—the penis being reduced to a mere tubercle; the abdomen distended, highly tympanitic, and painful on pressure; the pulse weak and quick; the bowels constipated, the tongue furred, stercoraceous vomiting occurring every few minutes, and the child crying in a faint exhausted manner; in short, presenting every appearance of being *in extremis*. The right hernia was soft and easily reduced; the left was firm, lumpy, and bright on the surface, and refused, after a quarter of an hour's cautious taxis, to yield in the slightest. I then had recourse to enemata of soap and warm water, and succeeded in bringing away some fetid, brown, mucoid substance from the lower bowel; still the hernia refused to go up. I next got the unfortunate little patient into a hot bath, and fomented the part well with a soft sponge for a quarter of an hour, when, after a few minutes' careful manipulation, the bowel gradually ascended from the scrotum. Keeping my thumbs over each inguinal canal

whilst the child was being removed from the bath, I applied pads and a figure-of-eight bandage in the usual manner, the scrotum at this time being quite small and corrugated. Since then the vomiting has ceased, the bowels have been regularly moved, the abdomen has diminished in size, food has been regularly taken, and the child restored to its usual health. (Dr. J. T. Burgess, Lancet, July 12, 1879.)

LYMPHADENOMA OF THE TESTICLE.—Prof. Charles Monod, and Dr. Terillon, conclude an interesting paper upon this subject (*Archives Générales de Médecine*, July) as follows:

1. Lymphadenoma or tumor constituted by a tissue of new formation, comparable to that of the lymphatic ganglions, may be developed in the testicle.

2. It constitutes a variety of *sarcocele*, anatomically perfectly distinct, and a differential diagnosis in the living possible.

3. It seems to attack by preference the gland itself, sparing the epididymis.

4. The entire gland is affected in the very commencement. The degeneration seems to begin in the intertubular cellular tissue, and secondarily to gain the walls of the seminiferous tubes, which themselves disappear at length in proportion as the neoplastic tissue extends.

5. Lymphadenoma may affect both testicles either successively or simultaneously: this fact seems peculiar to this neoplasm.

6. The generalization is remarkably rapid. Frequent in the viscera and in the bones, it may also be manifest in the cutaneous and in the subcutaneous tissues, at a great distance from the original focus of the disease. This characteristic, as well as the one previously mentioned, is a great help to diagnosis.

7. The affection of the economy may exist for a comparatively long time, without inducing any appreciable cachexia.

8. Lymphadenoma of the testicle does not appear to be accompanied by leukemia.

9. The prognosis is unfavorable, and so far all surgical intervention has been useless.

CYSTIC TUMOR OF THE PAROVARIUM—REMOVAL BY EXCISION. Jane B., aged thirty, married eleven years, two children. Increase in size very gradual, and dating from a miscarriage five years ago; more on left than right side; no pain; regular menstruation. Pinched appearance, and usual physical signs of ovarian tumor. Fluctuation very distinct through thin walls. No superficial adhesions; free from pain. Uterus free and normal in size. Girth round umbilicus forty-one inches; after operation twenty-nine inches. On first of May abdomen was opened antiseptically; both ovaries found healthy. A large cyst, free from adhesions, arising from left broad ligament, tapped and emptied, containing about one gallon of clear fluid. Had a fairly long slender pedicle, which was transfixed and tied with carbolized silk in two portions, and dropped back into abdominal cavity. Wound was closed with silk sutures, dressed with dry carbolized gauze and tow, without protective, and left untouched for twelve days. It was then closed, healing without suppuration. Acute hysteria, with tenderness and congestion of ovaries, fourth and fifth day after operation. Subacute cystitis, probably from introduction of septic matter on the catheter, thirteenth to eighteenth days, yielding readily to twenty-grain doses of sulphocarbolate of soda. Well and about in twenty two days.

Cysts attaining a large size developing from the parovarium are rare. "They are not generally pedunculated, but spring from the broad ligament as sessile growths distinct from the ovary." (Ziemssen.) And it is in this that they are of much surgical interest for—avoiding the risk of the clamp or multiple ligature as applied to a thick short pedicle—Miner's operation of enucleation can easily be performed. To quote Schroeder:—"Miner starts from the opinion that the vessels are spread out only over the superficial surface of the cyst, and that none but capillary vessels enter the true cyst-wall. For this reason he goes deep down where the pedicle spreads over the cyst-wall, and enucleates the tumor by separating the thin vascular extension of the pedicle from the surface of the cyst." (Dr. Langley Browne, Lancet, July 19, 1879.)

Notes and Queries.

FEMALE DOCTORS.—In the Louisville Medical News, July, Dr. Lunsford P. Yandell, now in London, thus discourses of female doctors, in one of his very interesting letters:

I have met two fine English women who have lately returned from their medical studies in France, and at an early day will take their degrees. I see no reason, barring human prejudice, why they should not succeed in the profession they have chosen. Having strong minds, rare educations, high professional acquirements, fine presence, and all the ambition and energy that could be desired, what hinders them? For my part, I am strongly inclined to allow—nay, I am in favor of allowing—the fillies an equal chance with the colts in the race for the medical cup and purse. There has been much talk about the indecency of female students witnessing along with males certain operations and examinations; and I confess that I have been shocked at seeing young women with young men looking on at certain surgical clinics in the male wards of the French hospitals. But I was none the less shocked the other day by seeing young artists of both sexes, side by side, copying in crayon nude male statues in the British Museum. If female artists in mixed company may draw and sculpture men in marble who have not on them the Garden-of-Eden garment (a fig-leaf), or the Georgia major's costume (a shirt-collar and a pair of spurs), then where is the harm in the sons and daughters of medical science looking together on naked sick men? The marble men are certainly the more attractive.

DR. CORNETT ON YELLOW FEVER.—The Courier, Madison, Ind., July 10, contains a long contribution upon yellow fever

by that venerable and venerated physician, so well known by the profession of Indiana at least, Dr. W. T. S. Cornett. Dr. Cornett concludes his paper as follows:

"I have now, I think, presented a sufficiency of the past history of this disease, together with the opinions of eminent men and learned societies, to convince the unprejudiced that it is not indigenous to our country; but that it is an imported disease and spreads by contagion. Consequently, there is but one method of preventing its occurrence among us, namely, quarantine—rigidly enforced against all places where the disease is known to exist. When it eludes quarantine and makes its appearance, then isolation and segregation should be promptly resorted to. There should be no deception practiced upon the people in reference to its existence. The flag of warning should be as promptly displayed as if it were small-pox."

Dr. Brodie's Dilemma.—The following extract from the Michigan Medical News, July 10, shows what it is:

"The London correspondent of the American Practitioner asks, 'Where would Kentucky be without whisky?' And answers, 'Not in the van of a great republic, but in the static condition of teetotal races.' Kentucky is a great state, but it is a question whether her men, who imbibe Bourbon, are more famous than her horses, which eat blue grass."

A Reasonable Doubt.—We copy from one of our exchanges the following prescription, "which is recommended by Dr. Palmer." But what Dr. Palmer? Not A. B. of Ann Arbor, nor E. L. of Louisville, nor C. D. of Cincinnati, for these are all educated men, and by no conceivable possibility could any one of them write such a prescription as this:

℞ Aloes . . . . . .
Ex. thyoscyami . . . . . āā ʒ j 4.00
Ext. nucis vomiciæ (alcoholic) . gr. xij 72
Ipecacuannhæ . . . . . gr. vj 36

M. Ft. pil. xxx. Take one pill each night on going to bed.

AN HONOR TO PROFESSOR BYFORD.—In the Chicago correspondence of the Boston Medical and Surgical Journal, July 10, we find the following:—"Prof. Byford has recently received an official invitation to attend the forthcoming annual meeting of the British Medical Association, and to deliver an address before that body. The Association meets in the early part of August at Cork. Prof. Byford will attend."

Now we are willing to wager a dollar against a bushel of Chicago wheat that Dr. Byford was not invited to address the British Medical Association, but simply invited to attend its meeting, and to present a contribution to the "Section C—Obstetric Medicine," just as dozens of other American doctors had invitations to the Association, and to present contributions to that or some other of the "Sections;" Dr. Sayre, for example, presents a paper to the Section on Surgery.

DR. WEATHERLY'S HORSE.—In the Advertiser and Mail, Montgomery, Ala., an interesting account is given of the presentation of a horse (which was not a horse but a mare), from the blue grass region of Kentucky, to Dr. Weatherly, a physician of Montgomery, so widely known, so highly esteemed, by Dr. William O. Baldwin, whom the profession know if possible still better. Really, as we read the column and a half of speeches—one in presenting, the other in receiving the gift—speeches of course that were appropriate and graceful, we can not but wonder what amount of rhetoric would have been necessary in case a pair of horses had been given!

WHAT IS SUCCESS?—Some time ago we read a paper in one of our exchanges, having as its title "a successful case" of a certain disease. Greatly to our disgust at the extraordinary use of language, we found that the patient recovered! Really a disease usually fatal, that in an individual instance terminates in recovery, does not succeed very much in that case,—the fact is as a disease it ought to be set down as a failure.

On the Influence of Brain Work on the Development of the Cranium and the Brain.—(*Gaz. des Hôpitaux*, March 13, p. 243.)—MM. Lacassagne and Cliquet have examined, by the aid of the *Conformateur*, the heads of one hundred and ninety doctors of medicine, one hundred and thirty-three rudimentarily educated, ninety illiterate and ninety-one prisoner soldiers, with the following results:

		Soldiers.		
Diameters.	Doctors.	Educated.	Uneducated.	Prisoners.
Longitudinal . .	85.29	81.97	79.13	81.10
Frontal . . .	48.91	43.65	42.35	41.12
Parietal . . .	52.58	49.66	50.27	49.90

There is thus a considerable difference in favor of the doctors, and this is especially marked in the frontal measurements. Moreover, the two sides of the head are not symmetrical—in the educated the frontal region is more developed to the left; in the uneducated the occipital region is more developed to the right. The head is larger (more developed), in the case of the educated than in those of inactive intelligence. Among the educated the frontal region is more developed in proportion than the occipital—and, if the difference is greater in the occipital, it is very trifling; while among the illiterate it is considerable. (Brain, July, 1879.)

To Subscribers—*Publishers' Notice.*—Those who are indebted for the *American Practitioner* are earnestly requested to remit at once. The importance of this notice it is hoped will be appreciated by them, as a prompt compliance with the request will be by the publishers.